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PSYCHOLOGY AND THE PREPARATION OF THE TEACHER FOR THE ELEMENTARY SCHOOL

A SURVEY AND AN ANALYSIS OF PRACTICES IN THE TEACHING OF PSYCHOLOGY IN CERTAIN PROFESSIONAL SCHOOLS FOR THE PREPARATION OF TEACHERS

By

CLARA L. ROBINSON, Ph.D.

Teachers College, Columbia University
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Clara L. Robinson

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PSYCHOLOGY AND THE PREPARATION OF THE TEACHER FOR THE ELEMENTARY SCHOOL

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CHAPTER I

THE PROBLEM

Its Implications

This study was undertaken to determine, if possible, the present status of the teaching of psychology in teacher-training institutions for the preparation of teachers for elementary schools; to ascertain what, if any, are the trends in attempts to utilize psychology in the preparation of such teachers; and to discover the psychological implications of actual classroom situations for which prospective teachers seek preparation.

The effort to secure the data desired was prompted by the imperative needs of all concerned with educational procedures, but felt with deep concern by none more than by the teachers of psychology in our teacher-training institutions. Present-day conditions insistently demand more competent teachers. The demand is not new, but it has added force since the methods of science have been applied to school procedures and products. Stimulated by the results of research, leading educators challenge theories which have been commonly accepted since the establishment of schools for the preparation of teachers, and they now question the validity of these theories. This questioning stirs the theorist to a closer scrutiny of the assumptions fundamental to his views.

Concurrently, elementary school teachers, charged with the performance of responsible duties in the classrooms of our elementary schools, seek for verified principles upon which to base their methods. These teachers, by far the largest group engaged in school work, desire to acquire the skill which would enable them to interpret and apply those principles. Their desire to know whatever of truth has been established prompts a most searching

inquiry respecting the theories and practices of professional institutions for the preparation of teachers.

Persistent critical interrogations concerning procedures followed in teacher-training institutions have been directed toward each aspect of the school program. Psychology has not escaped the energizing experience ensuing from keen criticism on the part of many who question the reality of values which, for many decades, have been expected to issue forth from the study of psychology in an academic setting. These searching inquiries into the results obtained from the study of psychology stimulate the effort to secure the facts necessary for consideration in relation to the preparation of teachers for elementary schools.

An important date in the history of the preparation of teachers is 1920, when The Carnegie Foundation for the Advancement of Teaching published its Bulletin Number 14, "The Professional Preparation of Teachers for the American Public Schools." The appearance of that document led to the criticism of some of our widely accepted theories and of our generally pursued practices. No section of the program of teacher preparation escaped scrutiny, and so psychology and its place in the preparation of teachers are under the microscope.

Even a cursory examination of the literature of the teacher-training field will reveal the prominence accorded to the study of psychology. Has its content inherent values for the pre-service teacher? This seems never to have been doubted. How best can its values be made available in classroom situations? Evidence is not at hand to provide the answer. There is, however, much testimony to the belief in the need for a study of this subject by those expecting to teach.

In 1839, Emerson Davis, one of the leaders in education at that time, said in a public address,

> Since the object of teaching is not solely to impart information but to cultivate the mind and prepare it to acquire knowledge without the assistance of teachers, it follows that those who would teach successfully must know something respecting the human mind and the best way of developing its various faculties.[1]

An opinion of the same nature is shown later in the catalog description of the course in psychology given at the State Teachers College at Greeley, Colorado, for 1894, where we find:

[1] American Institute of Instruction, 1839, p. 61.

Psychology is the Blackstone of Pedagogics. In so far as teaching is a science and an art it is based upon it. Just as a teacher makes psychology the basis for his educational theories and practices has he standing among his fellow teachers and in his profession.

Such were the views held by the majority of the leaders engaged in shaping policies of teacher-training institutions. If there were any who held doubts as to the wisdom of the usual plans for the preparation of teachers, their statements were not widely disseminated.

It is not the purpose of this study to evaluate theories nor to outline any plan for the reconstruction of curricula for teacher-training institutions for teachers of elementary schools; the purpose is, rather, to present a picture of existing conditions the analysis of which may suggest possible improvements. Healthy growth of the program for the professional preparation of teachers requires that every effort be made to discover both the needs and the means for meeting those needs.

To anyone who carefully studies the status of psychology in existing programs for the preparation of teachers several challenging questions suggest themselves. Many of these concern the methods of presentation of the subject; the most valuable portions of the subject; the extent of overlapping in courses as they are now set up; the essentials of the subject which should affect the techniques used in the classroom; the prerequisites; the amount and kind of original work done by the groups of students; and other related phases concerning the handling of this subject. These aspects of the situation require research to reveal their import. The present study attempts to answer the following questions:

1. What are the changing trends, if any, in the teaching of psychology in schools for the preparation of elementary school teachers?

2. What preparation for their positions in professional schools for teachers of elementary grades have instructors in psychology had?

3. In what manner and to what extent are attempts made to utilize psychology in the preparation of teachers for elementary schools?

4. How does the service-load of the instructor in psychology compare with that of other teachers in certain institutions?

5. To what extent is the practice school recognized as a laboratory by the instructor in psychology?

6. What functions of psychology are most frequently indicated in classroom contacts in elementary schools?

Procedures

To obtain the quantity and type of information necessary for the present study, the following course of procedure was adopted and carried out:

I. Data were secured from which to determine the trends, if any, in the teaching of psychology in professional schools for the preparation of teachers for elementary schools:
   1. Through an analysis of catalogs issued by some of the older schools of this type from their first session to the present one.
   2. By means of an inquiry addressed to teachers of psychology in such schools as are listed in the Educational Directory of the Bureau of Education, 1925.

II. A survey of present practices was made:
   1. Through an analysis of current catalogs of professional schools for the preparation of teachers for elementary schools.
   2. By means of the inquiry above referred to (I, 2) sent to teachers of psychology.
   3. Through reference to studies previously made of certain phases of work in these schools having identical features.

III. A determination of the content and method used was undertaken:
   1. By means of a data sheet which was sent to instructors in the subject to obtain facts about:
      a. Qualifications of instructors—academic preparation; years of teaching experience; years of teaching psychology.
      b. Methods used in instruction.
      c. Basal texts and reference books used.
      d. Types of courses given.
   2. Through an analysis of the texts most frequently used,

to determine the nature of the content being offered in the courses given.

IV. Information was obtained directly from in-service teachers as to their difficulties:

1. Through the medium of a diary record kept by classroom teachers throughout the country.
2. Through an analysis and a classification of teachers' difficulties to obtain data to be used in arriving at conclusions as to the psychological implications of these situations.

V. Conclusions are drawn as to:

1. The present status of the teaching of psychology in professional schools for prospective teachers.
2. The nature of the service which psychology should render to teachers for elementary schools.

CHAPTER II

CHANGING TRENDS IN THE TEACHING OF PSYCHOLOGY IN CERTAIN PROFESSIONAL SCHOOLS FOR THE PREPARATION OF TEACHERS

As Shown by Analysis of Catalogs

The very use of the word "trends" rather than "status" is indicative of the need of constant evaluation and adjustment of content, organization, and methods of teaching, in response to the demands of a dynamic society.[1]

To discover what, if any, were the trends in the teaching of psychology, an analysis was made of 221 catalogs issued by thirteen of the older normal schools established in eight states of the United States between 1839 and 1903, beginning with the earliest available catalog issued by each of these schools and concluding with those issued, in many cases, as late as 1926.

The picture is not sharply delineated because of these conditions:

1. Complete files of the catalogs of any one of these schools were not available.

2. There is no uniformity in the preparation of catalogs, either in comparison with those of other schools or with preceding issues of its own.

3. Names applied to courses cannot be relied upon as exact indicators of the nature of the work done therein.

4. Descriptions of courses, at times, give ideas not wholly in accord with the names of the courses.

5. School years are not standardized as to length in weeks, terms, or semesters.

6. Catalogs do not always contain full information as to instructors assigned to various courses nor of the degrees held by the members of the faculty.

7. Professionalized subject matter courses include the psychol-

[1] Cora M. Winchell, in an address given before the Home Economics Section of the Land Grant College Association, Nov. 13, 1924, in Washington, D. C.

ogy of the subject, hence the courses listed as Psychology do not indicate accurately the total amount of work in psychology being done in schools which, in attempting to reconstruct their curricula, are experimenting with such professionalized courses.

Certain significant facts, however, are revealed by the analyses shown in Table I and Table II. One of these is that in the early decades of the existence of the thirteen schools studied, the courses in philosophy were usually taught by the principal of the school, most frequently a man, usually one with the degree of Doctor of Philosophy. Later, at intervals, men having the Bachelor's or, more rarely, the Master's degree are cataloged as the teachers of psychology. More rarely one or more, in a few cases all, of the courses were given by a woman, or by women. In one school all the courses were given by one woman, who was assisted by a student in the school (1904). With but two exceptions, by 1890 all the schools studied were offering, and usually requiring, at least one course bearing the name of psychology. Livingston, Alabama, had no such course in the catalog of 1893, but after 1898 there is no omission.

San Francisco, California, listed a course called *Education* in 1917 and again in 1919, but described it as including the psychology offered at the time. Dr. Burk organized and conducted the work on his unique plan, which may have given his students quite as much of psychology as was offered in other schools differently administered. With these two exceptions, the thirteen schools, from 1890 to 1924 (or 1926) offered annually courses varying in number, by schools, from 1 to 22, and in class hours from a minimum of 30 hours a week, as a total offering in the two-year course, to 39 hours a week in another school offering a four-year course. (Data are not available for computing the total of class hours offered by one school listing 22 courses.)

Another outstanding feature revealed by the analysis is the evidence of changes produced by new movements in education. In the early decades the influence of Herbart is strongly shown. *Mental* and *Moral Philosophy* and *General Method* are listed prominently during those earlier years. At the close of the nineteenth century came courses called *Child Study*, showing the influence of G. Stanley Hall and his associates. During the second decade of the twentieth century these schools began to list courses named *Educational Psychology*. Very soon afterwards several

[*Continued on page 27*]

TABLE I

Courses Indicated as Offering All the Work Given in Psychology in 13 Teacher-Training Institutions from 1846 to 1927

KEY TO TABLE I

Column 1: Name of city or village and state where school is located.
Column 2: Date of opening of the school.
Column 3: Date of catalog analyzed.
Column 4: Length of course in years.
Column 5: Number of terms (or semesters) in a year.
Column 6: Number of weeks in term (or semester).
Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
Bridgewater, Mass.	1840	1846	1	3	14	(Courses not named)						
		1855	1	3	10	(Courses not named)						
		1865	2	4	10	* Mental and Moral Philosophy		20				
		1869	2, 4			Mental and Moral Philosophy						
		1870				* Psychology						Principal (Man), Didactics, Rhetoric, Moral Philosophy
		1878				* Psychology						Principal, Didactics, Rhetoric, Bookkeeping
		1880	2, 4			* Psychology			2		2	Principal, Science and Art of Teaching
		1881	4			* Psychology	11		2		Sr.	Principal, Science
		1885	4			* Psychology	11		2		Sr.	Principal, Science
		1888	2, 4			* Study of the Mind; Educational Study of Man	11		2		2	Principal, Science
		1892	2, 4			* Study of the Mind	11		2		2	Principal, Science
		1893	2, 4			*Psychology for the Principles of Educ.			1		1	Principal, Science

				* Educational Study of Man	11		2	2	Principal, Science
	1894	2, 4		*Psychology as for 1893	11				
				* Study of Man as for 1893	11				Principal
	1895	2, 4		As for 1893					
	1896	2, 4		As for 1893					
	1897	2, 4		As for 1893					
	1898	2, 4		As for 1893					
	1899	2, 3, 4		* Elemental Psychology			1	1	
				* Educational Study of Man	11		2	2	Principal
	1900			As for 1899					
	1901			As for 1899					
	1902			As for 1899					
	1903			As for 1899					
	1904			As for 1899					
	1905			As for 1899					
	1906	2, 4		* Study of Man	10		2	2	
				* Child Study	2		2	4	
				Elemental Psychology			1	1	
	1907			* Elemental Psychology	2		1	1	
				* Educational Study of Man	10		1	2	
				* Child Study	2		2	2	
				* Psychology II	10		2	2	
	1909			As for 1907					
	1910			* Elementary Psychology	2		1	1	
				* Educational Psychology	10		1	1	
				Child Study	2		2	2	
	1911			* Psychology and School Laws			1	Last	
	1913			* Psychology and School Laws					
	1916			* Educational Psychology				2 or 3	
	1917	2, 3		Psychology	4	19		2 or 3	Man; Director of Junior High School
				Psychology of Adolescence	4	9½		3	Course; Teacher of School Administration
	1918	2, 3		* Psychology	3	13		1	
				* Psychology of Adolescence	3	13		3	
				* Child Study	2	13		1	

TABLE I—(*Continued*)

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Column 1: Name of city or village and state where school is located.
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Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
		1919	2, 3			* Psychology I. (Introductory)	3	13			1	
						* Psychology II. (Supplementary)	3	13			2	
						* Psychology III. (Adolescence and Measurements)	3	39			3	
		1920	2, 3			As for 1919 and Child Study	3	13				
		1921	2, 3			As for 1920	3	13				
		1922	2, 3			As for 1920	3	13				
		1926				* Psychology I. (Learning Process)	3	13			1	Man (No degree mentioned) School Administration
						* Psychology II. (Applied Psychology and Measurements)	3	13			2	
New Britain, Conn.	1850	1850				No course named psychology						
		1891				* Psychology and General Principles					2	
		1913				* Psychology and Principles of Teaching	3	20				Principal (Man)
		1914				Psychology and Principles of Teaching						Principal (Man)
		1915				Psychology and Principles of Teaching						Principal (Man)
		1916				Psychology and Principles of Teaching						Principal (Man)

		1917				Psychology and Principles of Teaching	5	30				Principal (Man)
		1918	2			Psychology and Principles of Teaching						Principal (Man)
		1919	2			Psychology and Principles of Teaching						Principal (Man)
		1920				* Psychology including Tests and Measurements	4	18				Principal (Man)
		1921				Psychology including Tests and Measurements	4	18				Principal (Man)
		1922	2			* Psychology						Man (Not principal)
		1924	2			* Psychology (General and Educational)	3	40				Man (Not principal)
						Professionalized Subject Matter Courses						
		1926				As for 1924						Man (Not principal)
Oswego, N. Y.	1861	1891				* Psychology as a Basis for Philosophy of Instruction			1		2 or 3	Woman (No degree given)
		1892				* Philos. (and Hist. of Educ. as in 1891)			1		3	Woman (No degree given)
		1896				* Philos. (and Hist. of Educ.)			2		2	
						* Ethics and Psychology						
		1901				* Psychology		10	1		Jr.	Man, Ph.D.
		1903				* Psych. and Hist. and Science of Educ.		10			Jr.	Man, Ph.D.
		1906				* Psychology						Man, Ph.D.
						Child Study						Man, Ph.D.
		1909				* Psychology						Man. Ph.D.
						General Method (largely Psychology)						
		1910				* Psychology						Man, Ph.D. History of Education, Drawing Methods
		1912				* Psychology						Man
		1926				* Psychology						Man
San Jose, Calif.	(1862) 1871	1896	4	2	20	* Psychology	5	20	2		2	Man, Ph.D. (Ranked second to. principal)
						* Applied Psychology (including Methods)	5	20	2		3	Man, Ph.D. (Ranked second to. principal)
						* Psychology	5	10	2		4	Man, Ph.D. (Ranked second to. principal)
						* Pedagogy (Based on Psychology)						
						Methods (Based on Psychology)						

TABLE I—(*Continued*)

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Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
		1900				* Psychology	5	20	2		2	Man, A.M. (19th on list of teachers)
		1904			12	Psychology, Jr. A.	3	12				Woman, A.B. (Teacher of Geography)
					12	Psychology, Jr. B.	3	12				Woman. (Teacher of Geography)
		1911				Psychology, Jr. A.	3					Woman, A.M.
		1913				Psychology, Jr. A.						Woman, A.M.
		1914				Psychology	5		2		1	
						Child Study	5		3		1	
		1916				* General Psychology						
		1918				* Elementary or General Psychology						
						Mental Measurements and Mental Tests						
						Psychology of Exceptional Children						
		1919	2. 3. 4			* General Psychology						
						* Educational Measurements						
		1922				* General Psychology	4	18			1	Man, B.S.
						Child Psychology	3	18			(2 or 3)	Man, B.S.
						* Educational Psychology	3	18			(2 or 3)	Man, B.S.
						* Educational Measurements	3	18			(2 or 3)	Man, A.M.
						Introduction to Mental Tests	3	18				Man, A.M

						Introduction to Study of Exceptional Children	3	18				Man, B.S.
						Advanced Educational Measurements	3	18				Man, A.M.
						Advanced Educational Psychology	4	18				Man, A.M.
						Advanced Mental Testing	4	18				Man, A.M.
						Abnormal Psychology	2	18				Man, B.S.
						Social Psychology	2	18				Man, B.S.
		1923				Introduction to Educational Psychology	4	18				Man, B.S.
						Educational Measurements	3	18				Man, B.S.
						Child Psychology	3	18				Man, B.S.
						Psychology and Education of Exceptional Children	3	18				Man, B.S.
						Advanced Educational Psychology	4	18				Man, B.S.
						Social Psychology	2	18				Man, B.S.
						Problems of Modern Psychology						Man, B.S.
						Introduction to Mental Tests	3	18				Man, B.S.
						Elementary Educational Statistics						
						Advanced Educational Measurements	3	18				Man, B.S.
						Advanced Mental Testing	4	18				Man, B.S.
LIVINGSTON, ALA.		1883	2, 4			* Mental and Moral Philosophy					Sr.	
		1893	2, 3, 4			* (Methods of Teaching Common Branches)					2, 3, 4	
		1898		3		Psychology			3		Jr.	
		1899		3		Psychology					Jr.	
		1900	2	3		Psychology			1, 2, 3		1, 2, 3	
		1904				Psychology			2		2	
									2 & 3		3	
		1907				Psychology and Methods in Common Branches			All		3d	
		1919				Psychology	5		All		2d	
						Child Study	7		All		3d	
		1921		3		* Elementary Educational Psychology	2		All		2d	
						* Elementary Psychology	4	12	1		1st	
						* Educational Psychology	4	12	2		1st	
						* Child Study	4	12	3		1st	

TABLE I—(*Continued*)

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Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
TEMPE, ARIZ.	1886	1896				* Psychology	5	20	1		2d	Principal (Man). Ph.D., Pedagogics, Mathematics
						* Psychology (Logic; Ethics) Child Study	5	20	2		2d	
		1901	4			* Psychology (Basis of all professional work)	5			1	3d	Man (not principal), Ph.D.
						Pedagogy	5			2	3d	Man
						Advanced Psychology and Logic	5			1	4th	Man
		1902				As for 1901						
		1903				As for 1901						
		1905	5			Psychology (Basis of all professional work)						
		1909	2, 5			Psychology	5			1	Jr.	
						Pedagogy	5			2	Jr.	
		1910				Psychology	5			1	Jr.	Man. Ph.D.
						Pedagogy	5			2	Jr.	
						Ethics and Child Study	5			2	Sr.	
		1911				Psychology	5	18		1	Jr.	
						Pedagogy	5	18		2	Jr.	

		1912				As for 1911					Man with no degree
		1913				As for 1911					Man, A.M. Teaches all biology courses
		1914				Psychology					Man, A. M., Director Training School, Ethics, Sch. Law.
Willimantic, Conn.	1889	1889				* Psychology and Pedagogy	2		3		
						* Psychology and Pedagogy	4		4		
		1891				* Psychology and Pedagogy	2		3		
						* Psychology and Pedagogy	2		4		
		1892				As for 1891					
		1895	2			* Psychology and Methods	5	20		Both	
		1896				* Psychology	5	10		1st	
		1897				As for 1896					
		1898				As for 1896					
		1899				As for 1896					
		1900	2			* Observation and Psychology	4	20	All	1st	
		1902	2			* Psychology and Observation	4	20		Both	
		1903				* Psychology	4	20		1st	
		1904				As for 1903					
		1905				As for 1903					
		1906				As for 1903					
		1907				As for 1903					
		1908				As for 1903					
		1909				As for 1903					
		1910				As for 1903					
		1911				As for 1903					
		1913	2			* Psychology	3	20			
		1914				As for 1913					
		1915				As for 1913					
		1916				As for 1913					
		1917				As for 1913					
		1918				* Psychology and Principles of Teaching	3	40			
						Psychology of Special Subjects and Educational Measurements	3	20			

TABLE I—(*Continued*)

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Column 5: Number of terms (or semesters) in a year.
Column 6: Number of weeks in term (or semester).
Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
		1919				As for 1918						
		1921				As for 1918						
		1923				* Psychology	3	20				
						Psychology of Special Subjects and Educational Measurements	3	20				
Framingham, Mass.	1839	1897				* Psychology						Principal (Woman)
		1903				* Psychology						Principal (Man). School Organization and Government
		1905				Principles of Education (Mind, etc.)						Principal (Man). School Organization and Government
						Psychology of Childhood						Woman. Geography, Latin
		1906				As for 1905						
		1907				As for 1905						
		1908				As for 1905						
		1912				Principles of Education						Principal (Man). School Organization and Government
						Psychology of Childhood						Woman. Geography, Gardening
		1913				As for 1912						

	1914				Educational Psychology					Woman. Geography
	1915				* Educational Psychology	1	19		1	
					* Educational Psychology	2	19		2	
	1916				As for 1915					
	1917				As for 1915					
	1918				* Educational Psychology	1	19		1	Woman, Ph.B. Geography, Education
					* Educational Psychology	3	12		2	Woman, B.S. History, Civics, Education
	1919				As for 1918					Woman, A.M. Mathematics, Education
	1920				As for 1918					
	1921				Educational Psychology					Woman, A.M. Introduction to Education, Principles of Education
					Educational Psychology					Woman, A.M. Introduction to Education, Principles of Education
					Educational Measurements					Woman, A.M. Introduction to Education, Principles of Education
	1922				As for 1921					Woman, A.M. Introduction to Education, Principles of Education
	1923				Psychology	3	19		1	Woman, A.M. Introduction to Education, Principles of Education
					Child Study and Psychology of Subject Matter (Lower Grades)	3	19		2	Same
					Child Study and Psychology of Subject Matter (Upper Grades)	3	19		2	Same
					Fundamentals of Teaching					Same
					Measurements	2	19		2	Same
	1924				Psychology	3	19		1	Same
					Child Study and Psychology of Subject Matter (Upper Grades)	3	19		2	Same
					Child Study and Psychology of Subject Matter (Lower Grades)	3	12		2	Same
					Measurements	2	19		2	Same

TABLE I—(*Continued*)

KEY TO TABLE I

Column 1: Name of city or village and state where school is located.
Column 2: Date of opening of the school.
Column 3: Date of catalog analyzed.
Column 4: Length of course in years.
Column 5: Number of terms (or semesters) in a year.
Column 6: Number of weeks in term (or semester).
Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
GREELEY, COLO.	1890	1891	4	3	15	* Psychology	4	15	1		3	President, Ph.D.
					13			13	2			
					12							
		1892	4	3		As in 1891	4	28				President, Ph.D.
		1893	4	3		As in 1891	4	28				President, Ph.D.
		1894	4	3	15	Psychology	4	38	All		3	President, Ph.D.
					12							
					11							
		1895	4	3		Psychology	4	38	All		3	Man, A.M. Model School, Science
		1896	4	3	16	Educational Psychology	4	38	All		3	President, Ph.D. History and Science of Teaching
					11							
					11	Experimental Psychology and Physiology	5	38			3	Man, A.M.
						Child Psychology						Man, A.M.
		1898				* Psychology	5	38	All		3	Man, Ph.D.
		1899				* Psychology	3	36	All		3	
						Psychology	5	36				
		1900	3	2	19	* Psychology	3	36			Jr.	Man, A.M. Anthropology, Physiology

					Physiological Psychology (Experimental—"New")	5	36			Jr.	Man, A.M. Anthropology
					Historical Psychology	5	36				Man, A.M.
					Child Psychology						Man, A.M.
					Educational Psychology						Man, A.M.
	1901				As in 1900						Man, A.M.
	1902				As in 1900						Man, A.M.
	1903	2, 3	3		* Psychology	5		2		Jr.	Man, A.M.
					* Pedagogy	5		1		Jr.	Man, A.M.
					Physiological Psychology					Jr.–Sr.	Man, A.M.
					Experimental Psychology					Jr.–Sr.	Man, A.M.
					Systematic Psychology					Jr.–Sr.	Man, A.M.
					Pathological Psychology					Jr.–Sr.	Man. A.M.
					Comparative Psychology					Jr.–Sr.	Man, A.M.
					Child Study					Jr.–Sr.	Man, A.M.
					Historical Psychology					Jr.–Sr.	Man, A.M.
					Educational Psychology					Jr.–Sr.	Man, A.M.
	1904	2, 3	3	12	* Psychology (for teachers of elementary schools)	5	24			Jr.	Man, A.M., M.S.
					* Pedagogical Psychology (Teachers of Elementary Schools)	5	12			Jr.	Man, A.M. M.S.
					* Psychology (for teachers in high schools)	5	24			2d	Man, A.M. M.S.
					* Pedagogical Psychology (high school teachers)	5	12			2d	Man, A.M., M.S.
					Child Study						
					Systematic Child Study			2			
					Practical Psychology			1			
	1905				As in 1904						
	1906				As in 1904						
	1907				As in 1904						
	1908				As in 1904						Man, A.M., M.S.
	1909				As in 1904						
	1911		3		* General Psychology	5		1		Jr.	
								2			
					* Educational Psychology	4		3		Jr.	

TABLE I—(*Continued*)

KEY TO TABLE I

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Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
						Child Study	3					
						Experimental Pedagogy	2					
						Advanced Educational Psychology	2					
"State		1912	2			Psychology 1 (General Psychology)	5				1st	Man, Ph.D.
Teachers			4			Psychology 3 (Educational Psychology)	4				1st	Man, B.S. and A.B.
College"						Child Study	3					
						Clinical Psychology	3					
						Advanced General Psychology	2					
						Experimental Pedagogy	2					
						Psycho-Clinical Practice	2					
		1913				General Psychology	5					Man, A.B., B.S.
						Advanced Psychology	2					Man, A.B., B.S.
						Mental Pathology	3					Man, A.B., B.S.
						Mental Hygiene	3					Man, A.B., B.S.
						* Educational Psychology	4				1st	Man, Ph.D.
						Child Study	3					Man, Ph.D.
						Clinical Psychology	3					Man, Ph.D.
						Experimental Pedagogy	2					Man, Ph.D.
						Psycho-Clinical Practice	2					Man, Ph.D.

	1914			As in 1913						
	1916			* Psychology	4	12		1st		
				* Child Hygiene	5					
				Educational Psychology	4					
				Child Study	3		1			
							2			
				Psychology of School Subjects	4		2			
				Clinical Psychology	3					
				Mental Tests						
				Psycho-Clinical Practice	2					
				General Psychology	5					
				Conference Courses						
	1917			General Psychology	4		1	3d or 4th	Man, Ph.D. (President), Head Psychology Department	
				* Educational Psychology	4		1		Woman, Ph.D.	
				* Child Hygiene	2		1, 2	1st		
				Child development	5		Any 1	2d		
				Psychology of Elementary School Subjects	4		Any 1	2d		
				Psychology of Secondary School Subjects	2		Any 1	3d or 4th		
				Clinical Psychology	4		Any	3d or 4th		
				Mental Tests	4		Any	3d or 4th		
				Educational Tests and Measurements	2		Any	3d or 4th		
				Psycho-Clinical Practice	4		Any	3d or 4th		
				Conference Courses	4		Any	3d or 4th		
	1918			* Educational Psychology	4		1 & 2	2d	Man, Ph.D.	
				* Psychology of Elementary School Subjects or	4		Any 1	3d	Man, Ph.D.	
				* Psychology of Secondary School Subjects	4		Any 1	3d		
				Educational Tests and Measurements	3		Any 1	4th		
				Psychology and Statistical Methods						
	1921			As in 1918 with Vocational Psychology	4		Any	3d or 4th		
	1922			As in 1921 with Advanced Educational Psychology	3		1, 2, 3			

TABLE I—(*Continued*)

KEY TO TABLE I

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Column 3: Date of catalog analyzed.
Column 4: Length of course in years.
Column 5: Number of terms (or semesters) in a year.
Column 6: Number of weeks in term (or semester).
Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
		1926				* Educational Psychology	3		Any 2		2d	Man, Ph.D.
						* Child Hygiene	4					Woman, A.M.
						Child Development	4		3		2d	
						Psychology of Elem. School Subjects						Man, Ph.D.
						Psychology of High School Subjects						
						Clinical Psychology						
						Mental Tests and Measurements						
						Educational Tests and Measurements for Elementary Schools						
						Educational Tests and Measurements for High Schools						
						Psycho-Clinical Practice						
						General Psychology						
						Psychology of Music						
						Vocational Psychology						
						Psychology of Kindergarten-Primary Children						
						Psychology of Junior High School Children						

						Special Talents and Defects Mental Hygiene Statistical Methods Advanced Educational Psychology Advanced Educational Tests and Measurements Conference Seminar and Laboratory Speech Defects					
New Haven, Conn.	1893	1893	2	2	20	* Psychology and Pedagogy	2	40	All	2d	
		1894	2	2	20	As in 1893					
		1895	2	2	20	* Psychology and Art of Teaching	5	40	All	2d	
		1896				As in 1895					
		1897				As in 1895					
		1898				As in 1895					
		1905				As in 1895					
		1907				As in 1895					
		1908				As in 1895					
		1909				* Psychology		40	All	1st	
		1911				As in 1909					
		1912				As in 1909					
		1913				As in 1909					
		1914				As in 1909					
		1916				As in 1909					
		1917				As in 1909					
		1918	2	2	20	Psychology	3	20		1st	
						Applied Psychology	10	10		2d	
						Psychology of Mental Defectives	2	10		2d	
		1919				Psychology	3	20	2	2d	
						Psychology of Defectives	2	10		2d	
		1920				Psychology	3	20	2	1st	
		1921				As in 1920					
		1923				As in 1920					
(State uniformity begun)		1926				Psychology (General and Educational)	3	40			Man, Ph.D.

TABLE I—(*Continued*)

KEY TO TABLE I

Column 1: Name of city or village and state where school is located.
Column 2: Date of opening of the school.
Column 3: Date of catalog analyzed.
Column 4: Length of course in years.
Column 5: Number of terms (or semesters) in a year.
Column 6: Number of weeks in term (or semester).
Column 7: Courses offered in field of Psychology. (Marked * if given as required courses.)
Column 8: Hours (or periods) per week required for the course.
Column 9: Length in weeks of term (or semester) in which course is given.
Column 10: Term in which student takes the course.
Column 11: Semester in which student takes the course.
Column 12: Year in which course is to be taken.
Column 13: By whom taught (man or woman); degree held (if stated); other subjects taught by same person.

1	2	3	4	5	6	7	8	9	10	11	12	13
ATHENS, GA.	1895	1899		3	10	* Psychology	3	10	1	3		Man, A.M.
						* Psychology	3	10	2	3		
		1900				As in 1899						
		1904	2			Elementary Psychology	2			1	1st	Woman, Ph.B.
						Advanced Psychology	2			1	2d	Woman, Ph.B.
						Child Study	2			2	2d	Woman, Ph.B.
		1905				As in 1904						
		1906				As in 1904						
		1907				As in 1904						
		1908				As in 1904						
		1909				* Psychology	3		All		Soph.	
						Child Study and Advanced Psychology	2		All		Sr.	
		1910				As in 1909						
		1911				Psychology	4		2		2d	Man, A.B.
						Child Study	4		2		3d	
(4-yr. course begun)		1912				Psychology	4			1	Jr.	
						Child Study	2			1	Sr.	

		1924				* Educational Psychology	3			1	Jr.	
						* Child Psychology	3			1	Jr.	
						Educational Psychology	3			1	Jr.	
						* Tests and Measurements	3			1	Jr.	
San Francisco, Cal.	1899	1901	2			General Psychology (includes Educational)			All		Both	Man (Principal), Ph.D.
		1917				Education (includes Psychology)						
		1919				As in 1917						
		1921				General Educational Psychology						
		1924				* Psychology I. (Learning Process)						Woman, Ph.D.
						* Psychology II. (Individual Differences)						Woman, A.B.
						* Psychology III. (Educational Psychology)						
						Psychology						
Danbury, Conn.	1903	1907	2			Psychology	3	10			2d	
		1909				As in 1907						
		1910				As in 1907						
		1911				As in 1907						
		1912				As in 1907						
		1913				Psychology	2	15			2d	
		1914				As in 1913						
		1915				As in 1913						
		1916				Psychology	5	12			1st	
		1917				As in 1916						
		1918				Psychology and Pedagogy						
		1920				Psychology and Pegagogy						
						Tests and Measurements	1	24			Sr.	
		1922				Psychology and Pedagogy						
		1923	2			Educational Psychology	3	24			1st	
						Exceptional Children	3	8			1st	
						Tests and Measurements	2	16			2d	

TABLE II

Summary of Table I. Showing Changes in Numbers of Courses Offered in 13 of the Older Normal Schools

1	2	Framingham, Mass.			Bridgewater, Mass.			New Britain, Conn.			Oswego, N. Y.			San Jose, Calif.			Livingston, Ala.			Tempe, Ariz.			Willimantic, Conn.			Greeley, Colo.			New Haven, Conn.			Athens, Ga.			San Francisco, Calif.			Danbury, Conn.		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
2	1850							0																																
3	1865				1																																		
4	1878				1	1	1																																
5	1883																																						
	1888				1	1	1																																
	1889																						1																
6	1891							1			1												1	0	0	1													
	1893				2	0	1																1			1	0	3	1	0	0								
	1895				2	0	0																1	1	1	3			1	0	0								
	1896				2	0	0				2	1	0	3						3			1	0	0		0	1											
	1897	1			2	0	0																1	0	0														
	1898				2	0	0										1						1	0	0														
	1899				2	1	0										1	0	0				1	0	0	2			1	0	0	2							
7	1900				2	0	0							1	0	2	1	0	0				1	1	1	5	4	1				2	0	0						
	1901				2	0	0				1	1	2							3	2	2				5	0								1					
	1903	1	0	0	2	0	0				1	0	0							3	0	0	1	0	0	10	6	1											
	1904				2	0	0							2	2	1	1	0	0				1	1	1	7	5	8				3	3	2						
	1905	2	2	1	2	0	0													1	0	2	1	0	0	7	0	0	1	0	0	3	0	0						
	1906	2	0	0	3	1	0				2	1	0										1	0	0	7	0	0				3	0	0						
	1907	2	0	0	4	1	0										1	1	1				1	0	0	7	0	0	1	0	1	3	0	2				1	0	0
	1909				4	0	0				1	0	1							1	0	0	1	0	0	7	0	0	1	0	1	2	0	2						
8	1910				3	1	2				1	0	0							2	1	0	1	0	0							2	0	0				1	0	0
	1913	2	0	0	1	1	3	1	1	1				1	0	1				2	0	1	1	0	0	9	8	6	1	0	0							1	0	0
	1914	1	1	2				1	0	0				2	2	1				1	0	0	1	0	0	9	0	3	1	0	0							1	0	0
	1916	2	1	0	1	1	1	1	0	0				1	1	2				1	0	0	1	0	0	10	4	3	1	0	0							1	0	0
	1917	2	0	0	2	2	1	1	0	0										1	0	0	1	0	0	11	4	3	1	0	0				0	0	1	1	0	0
	1918	2	0	0	3	1	0	1	0	0				3	2	0							2	1	0	5	1	7	3	2	1							0	0	1
	1919	2	0	0	3	3	3	1	0	0				2	1	2	2	2	1				2	0	0				2	1	2				0	0	0			
9	1920	2	0	0	4	1	0	1	1	1				11	9	0										7	2	0	1	0	1							2	1	0
	1922	3	1	0	4	0	0	1	1	1				11	4	4							2	1	1				1	0	0							1	0	3
	1923	5	5	3																																		3		
	1924	4	0	1				1	1	1																			4	4	2	4	4	0					
	1926				2	2	4	1	0	0	1	0	0													22	17	2	1	1	1									

Key to Table II:
Column 1—Decade in period of state programs for preparation of teachers.
Column 2—Year summarized in columns A, B, and C.
Column A—Number of courses listed as psychology or described as being intended as such.
Column B—Number of new courses in psychology added since previous summary shown.
Column C—Number of courses in psychology in preceding summary not appearing the year indicated at the left.

varieties of the applications of objective measurements manifested themselves in the offerings in these schools. Another feature brought out by the analysis which was not, however, predominant, revealed itself in a statewide standardization of curricula as shown in Connecticut and in New York.

The tendency toward lengthening the time required for the professional preparation of teachers and, in some instances, the attendant tendency to change the name of the school to "State Teachers College" were coincident with an increase in the number of hours of work offered in psychology.

One of the most obvious facts shown by a study of the catalogs of these schools is the belief of those whose duty it was to write in the contents of the catalogs that the study of psychology would help to change the student from his state of unpreparedness to teach children to that of one competent to teach any and all children. The catalog issued by the school at Greeley, Colorado, in 1904, states, with reference to psychology:

> The work of this department is based on the belief that psychology is of prime importance to the teacher.

Athens, Georgia, 1909, put out a catalog in which psychology is thus described in part:

> Aim: to help the teacher gain sufficient knowledge of the laws underlying the development of human personality to enable him to work in harmony with those laws in guiding the development of the child.

In 1901, the Oswego, New York, Normal School catalog had this description of its work in psychology:

> The course lays the foundation for all educational theory and method. It aims to direct the pupil's attention from the content of thought to the psychological processes, thus cultivating that attitude toward the knowing and learning process which is so essential to successful teaching.

In 1896 the catalog of Tempe, Arizona, gives this statement as to its aim:

> To make each student a teacher who shall be able logically to determine method in school work—one who will not accept formula as method, but shall be able to be governed by method in adopting formula. Students will be constantly encouraged to test all conclusions, now generally received, in regard to teaching, in the light of the present knowledge of psychological principles, to state clearly the principles that their investigations verify, and to work out plans for the application of these principles in teaching all of

the common school branches. . . . In the profession of teaching, there is a demand for fuller investigation, greater originality in the application of methods, and a clearer expression of the results of individual experience, if the teacher is to be more than a mere imitator.

The catalog of the Willimantic, Connecticut, Normal School of 1896, in the description of its one course in psychology, given in ten weeks, five class hours a week, during the first year of the two-term course, states:

The course is intended to give the necessary preparation for rational consideration of pedagogical principles and their application to teaching and governing.

The catalogs of these, the oldest of the state normal schools, mirror the changing theories regarding the science and art of teaching. (*Didactics* was the term used in 1891.) The description of the course in *Philosophy of Education* in Oswego, New York, offered in 1891, reads:

Psychology as a basis for the philosophy of instruction must be studied either before the "methods" or side by side with them. Topics: perception, reproduction, apperception, attention, interest, desire, will. The aim is to make the study as objective as possible. Personal experience, the experiences of others, manifestations of individuals, characters in fiction, etc., furnish material for observation. After discussion calculated to secure clear understanding of individual facts, effort is made to deduce underlying principles and to base pedagogical rules upon them.

A note added states that changes made in the curriculum that year consisted of "dropping the study of Latin and German in all state normal schools. Physics, chemistry, and psychology are to be put in place of them hereafter." In 1903-04, psychology and the history of the science of education make up one course given in ten weeks of the junior year.

In 1896 ethics was given with psychology, the description indicating that much more of the former than of the latter was given. In 1901, psychology was placed in the first term of the junior year (in the two-year course then given). The description includes this statement:

The work is as inductive as possible, the students finding material for their work in observation, experiment, and literature. It also aims to give students an acquaintance with general psychology to enable them to read intelligently the current discussions of psychology and to open to them a large portion of psychological literature.

Three years later the state began to regulate the courses in all of the normal schools of that state (New York). Psychology was to be given 100 class hours. Child study was also listed as a distinct course and described thus:

> Formal work in child study begins in the practice school and extends through the entire term. Pupils are encouraged to become interested in the study of children.

Succeeding years show little change in the offerings in psychology at Oswego. From the time of its opening in 1861 the courses in philosophy and in psychology have always been taught by men holding the Doctor's degree.

A search for trends in another school, San Jose, California, opened in 1862, revealed that the catalog for 1896 indicated that a four-year course of study was required. One hundred class hours of psychology were required in the second term of the second year, the same amount in applied psychology the third year, and 5 additional class hours were required the second term of the fourth year. The description states that the aim of the work in psychology was:

> To give fair knowledge of psychology in its present stage of development and to prepare for courses in educational theory and history. Topics: meaning, problem, methods, and relations of psychology; sensations of touch, taste, smell, hearing, and sight; perception, memory, imagination, association, habit, attention, instinct, feeling, emotion and impulse, functions of conception and reasoning, and will.

A well-equipped psychological laboratory for experimentation and demonstration was provided. The course was given at that time by a man ranking next to the president.

In 1900 but one course was given, and that in the second term of the second year; 100 class hours were required. The description of the course follows:

> The chief purpose is insight into human nature. Experience of the members of the class in their self-observation of such points as perception, emotions, habit, and will are solicited and finally classified and defined. Keeping in view the connection this work has with teaching, the psychology of childhood is introduced in a comparative way and applications are made to the primary and grammar school work.

Demonstration and experimental work were done. There was an excellent psychological library, and the school afforded much additional help. The course at that time was given by a man

with the A.M. degree, who ranked nineteenth on the list of instructors.

In 1904 the catalog of that school announced two courses in psychology, one called *Junior A* was given three hours a week in one twelve-week term; the other, designated as *Psychology and History of Education*, was given similarly. The description of the work offered in psychology suggests unusual possibilities.

> This subject is commonly approached by the students with a feeling of awe and mystery, supposing that it treats especially of religion, spiritualism, hypnotism, immortality, an abstract soul, etc. This is a wrong view. The work of the classes is concerned with the movement of the everyday mind under normal conditions. Attention as to its causes, phases, and relation to learning; what we do when we think, and how to think effectively; types of memory and conditions for effective memorizing; kinds of imagination, with their values in school work; conditions for forming habits, nature and origin of instincts; imitation; why there exist such strong differences among people in their observing powers; the relation of the body to the mind; the value and cultivation of the emotions; these and other topics will be considered. The personal experiences of the pupils are constantly used to enrich and make practical the understanding of the human mind. Also, special experiments are conducted to solve certain problems, as, for example, How many things can be attended to at once?
>
> Conclusions are especially helpful in understanding children, but they form also the only basis for appreciating movements of history and the informing spirit of literature.

The course was taught by a woman having the A.B. degree, who was listed as the teacher of geography.

From 1911 until 1914 but one course in psychology was given. This was taught by a woman with the A.M. degree. In 1914 changes were made. A department for training teachers for kindergartens was organized. Only one course in general psychology was given, but it was now scheduled for the second term of the first year and was given five hours a week instead of three as previously. A separate course in *Child Study* was given the following term, five hours a week.

In 1916 the catalog contained the statement that:

> Eighteen normal school equivalents in Education, including the study of the school as an institution and the curriculum, general psychology applied to education, and general method were required.

Two years later one course in *Elementary* or *General Psychology* was listed, covering five hours a week for one term. It was described as:

Required of all students as a basis for educational theory and practice; emphasis is based on the physiological basis of all psychology and the necessity of recognizing the difference between the inherited and the acquired characteristics. Laws governing attention, imagination, memory, habit, reasoning, will, etc., and the psychology of such educational theories as recapitulation, formal discipline, etc., are studied. The object of the course is to have the student understand and apply present-day laws and theories as advanced in Psychology and especially as related to child development and social conditions.

Two courses not previously mentioned were included in the curricula offered. These were designated as *Mental Measurement and Mental Tests,* and *Psychology of Exceptional Children.* We therefore learn when Differential Psychology received recognition there.

In 1919 both *General Psychology* and *Educational Measurements* were required. In 1921 the school became a state teachers college, offering two-year, three-year, and four-year professional curricula. For the course leading to a degree, six units in psychology and three units in educational psychology were required.

In 1922, twelve courses in psychology were offered, three of which were required. *General Psychology,* four hours a week, was required the first year. *Educational Psychology,* three hours a week, was to be taken either the first or the second year. *Introduction to Educational Measurements,* three hours a week, was also a requirement, but the year was not indicated.

The twelve courses offered presumably were taught by two men, one of whom had the A.M. degree, the other the B.S. degree.

This section of the study shows that certain unmistakable trends are evident. These are toward:

1. A greater number of curricula.
2. More highly specialized curricula.
3. More electives in each curriculum.
4. More academic enrichment of curricula.
5. Multiplication of courses in educational and other forms of applied psychology.
6. Requirement of at least one course in educational measurements.
7. A decrease in the amount of pure psychology and an increase in the amount of practical content in courses in psychology.

As Shown through the Medium of an Inquiry Sent to Teachers of Psychology in Teacher-Training Institutions

Collection of Data

To obtain information from which it was hoped to get data comparable to those collected by a committee of which Professor Guy M. Whipple was chairman and which reported on December 29, 1909,[1] an inquiry was addressed to the teachers of psychology in institutions for the training of teachers listed in the Educational Directory of the United States Department of the Interior, Bureau of Education Bulletin (1925) No. 1, pp. 113-119. One inquiry was sent to each school there listed except those designated as "private," "within outlying territory," or "for the colored race." Forms were sent to 195 institutions, 110 of which were normal schools and 85 teachers colleges. Returns were received from 38 of the normal schools, or 34½ per cent of those addressed, and from 53 of the teachers colleges, or 62 1/3 per cent of those addressed. Ninety-one institutions sent replies, or 46 2/3 per cent of the number addressed. Thirty-four states are represented in these returns. (Delaware, Florida, Nevada, Utah, and Wyoming are not on the list used as a basis for choice.) Connecticut, Iowa, Maryland, South Dakota, and Vermont returned 100 per cent of the blanks sent. Furthermore, in several schools where more than one instructor gives one or more courses in psychology, data were supplied by each such instructor. In all, 129 teachers contributed data from the 91 schools coöperating. Professor Whipple's report was based on 100 replies (84 from public, 16 from private normal schools) received in response to a questionnaire sent to 259 institutions (189 public, 70 private) listed as normal schools in the report of the Commissioner of Education for 1907. Of the states not represented in his report all except Arkansas, Georgia, and Oregon are represented in the present report. Other states, however, are not represented in this report. These are Alabama, Arizona, Colorado, Mississippi, Nebraska, and South Carolina.

[1] Guy M. Whipple, Chairman of Committee on *Teaching of Psychology in Normal Schools* as one section of the Report of the Committee of the American Psychological Association (on the Teaching of Psychology), Psychological Monographs, Vol. XII, No. 4, April, 1910, Whole No. 51, pp. 1-40.

Typical Teacher in 1909 and in 1927

Professor Whipple described the typical teacher of psychology in the normal school in 1909 as one who had "received training from an American college, holds bachelor's, possibly also an advanced degree, has taught psychology 8.5 years, has sole charge of the courses therein, and, in addition, gives courses in education."[1] The typical teacher of psychology in teacher-training institutions in June, 1927, when the inquiry was made by the writer, presents a slightly different picture. This difference may be due in part to the procedures followed in handling the data from the returns. The methods used by the writer varied with the nature of the data. Certain of the items lent themselves to

TABLE III

INSTITUTIONS IN WHICH PSYCHOLOGY WAS STUDIED BY 126 INSTRUCTORS WHO WERE TEACHING THE SUBJECT IN 1927 IN 91 PROFESSIONAL SCHOOLS FOR TEACHERS

NAME OF INSTITUTION	No.*	NAME OF INSTITUTION	No.*
Columbia University	41	University of Utah	1
University of Chicago	29	Ohio Wesleyan University	1
Harvard University	9	University of Virginia	1
Clark University	8	Howard University	1
University of Iowa	8	University of Maine	1
Peabody College	6	Syracuse University	1
University of Indiana	5	Johns Hopkins University	1
New York University	5	Mount Holyoke College	1
University of Pennsylvania	5	Bryn Mawr College	1
Cornell University	4	Ypsilanti Teachers College	1
University of Wisconsin	4	University of Illinois	1
Stanford University	4	Hamline University	1
University of Missouri	4	Valparaiso University	1
University of California	4	Greeley Teachers College	1
Boston University	4	Wellesley College	1
University of Nebraska	3	Grinnell College	1
University of Minnesota	3	University of Rochester	1
Yale University	3	Princeton University	1
University of Michigan	3	Ohio University	1
Tufts College	2	Brown University	1
Ohio State University	2	University of Wyoming	1
University of Colorado	1	University of South Dakota	1
York College	1	Dakota Wesleyan University	1
George Washington University	1	Oberlin College	1
Coe College	1	West Virginia Wesleyan	1

* No. indicates number having studied at each institution.

[1] *Ibid.*

mathematical treatment. The data concerning degrees held were estimated as follows:

Bachelor's degree represents 4 years of study.
Master's degree represents 5 years of study.
Doctor's degree represents 7 years of study and research.

Of the 128 teachers supplying data for this item, 10 held only the Bachelor's degree, 83 held a Master's degree (3 of these had the Master's degree with from 1 to 2 years' work beyond), 33 held the degree of Doctor of Philosophy, and 2 held the degree of Doctor of Education. By mathematical calculation it was found that the typical teacher of psychology in professional schools for the preparation of teachers in June, 1927, held the Master's degree with one half a year of graduate work beyond.

This typical teacher was a man, since of those sending in returns 87 were men, 35 were women, and 7 failed to identify themselves.

Where this typical teacher studied psychology was determined by preparing a frequency distribution, and then a regional distribution of the institutions reported by 126 teachers. Table III contains the frequency distribution. Fifty institutions were mentioned a total of 184 times. Three teachers made no report on this item. Grouping these as Eastern, Southern, Central, and Western, within the usual geographical lines, it appears that this typical teacher, like Dr. Whipple's, studied psychology in an American institution in the eastern section of the United States.

Training and Experience

Data supplied concerning where and when the highest degree was attained reveal that these degrees were received from 39 institutions mentioned a total of 126 times. Columbia had granted 30 of these degrees; Chicago 18. Sixty-nine had been granted by an Eastern institution. From the data supplied (Table IV), it was found that the highest degrees held by the 90 teachers who reported on this item were received in the years ranging between 1883 and 1927. The median year when the typical teacher received his highest degree was 1922.

Data with reference to the years of experience in teaching psychology were furnished by 125 of the teachers. The range was from 1 year to 35 years, with the mode at 3 years, the median, 5 years, and the mean, 7.35 years. Table V contains the data

TABLE IV

YEAR IN WHICH HIGHEST DEGREE WAS GRANTED TO 90 WHO WERE TEACHING PSYCHOLOGY IN TEACHER-TRAINING INSTITUTIONS IN 1927

YEAR IN WHICH DEGREE WAS GRANTED	NO. RECEIVING DEGREE	YEAR IN WHICH DEGREE WAS GRANTED	NO. RECEIVING DEGREE
1883	1	1917	4
1896	1	1918	5
1904	1	1919	1
1905	1	1920	1
1907	1	1921	7
1908	1	1922	10
1910	4	1923	9
1911	3	1924	12
1912	1	1925	4
1913	3	1926	11
1915	1	1927	5
1916	3		

Median Year: 1922

TABLE V

NUMBER OF YEARS OF EXPERIENCE IN TEACHING PSYCHOLOGY REPORTED BY 125 TEACHERS IN TEACHER-TRAINING INSTITUTIONS

YEARS OF EXPERIENCE	NO. OF TEACHERS	YEARS OF EXPERIENCE	NO. OF TEACHERS
1	13	12	4
2	10	13	3
3	23	14	6
4	9	15	2
5	13	16	2
6	10	19	2
7	5	20	5
8	2	21	1
9	2	23	3
10	8	35	1
11	1		

N = 125
Q_1 = 3 years
Median = 5 years
Q_3 = 10 years
Mean = 7.35 years

relative to this item. Assuming for purposes of comparison that Professor Whipple used the average for his typical teacher in 1909, the author chose the same term to represent the typical teacher in 1927. Consequently, it is assumed that 7.35 years fairly represent the teaching experience of this teacher.

Control over Offerings

To the question, "Do you have sole charge of teaching psychology in your school?" 97 made reply, of whom 72 gave a negative reply. Hence, the typical psychology teacher to-day is not so free in that respect as was his predecessor.

Other Courses Taught

To the question concerning the giving of other courses, 96 reported that they gave other courses, 81 of which were in education or allied courses. Such unrelated courses as Nature Study, Social Science, Literature, and Advanced Mathematics were being taught by a small number of teachers of psychology. General Science and Hygiene were reported by a few as being a portion of their teaching load. Thirty-two reported that they gave no other courses. One person failed to reply to the question.

Size of Classes

Professor Whipple reported that typical classes in this subject consisted of 107 pupils. The present survey shows classes ranging in enrollment from 15 to 237, with an average of 43.8 pupils. These classes usually meet in sections of from 24 to 50 pupils each. Replies given were not uniformly reported, though the majority indicated that classes were subdivided into groups.

Class Hours per Week

The question, "How often does your class meet?" was answered for 143 classes. Table VI gives the picture.

Length of Class Period

To the question, "What is the length of your class period in clock-hours?" 129 replies were given for 129 classes in 89 schools. It seems fair to assume that some made no deduction of time for the passing of classes and that others did make such allowances. The typical class period for psychology classes in teacher-training schools in 1927 was 50 minutes. Table VIIa summarizes the rec-

TABLE VI

CLASS HOURS PER WEEK OF 143 CLASSES IN PSYCHOLOGY IN TEACHER-TRAINING INSTITUTIONS

PERIODS	NO. OF CLASSES
1	1
2	12
3	71
4	29
5	28
6	1
7	0
8	1

N = 143
Q_1 = 3
Median = 3
Q_3 = 4 periods weekly

ords for individual teachers. Table VIIb contains the data selected on the basis of institutions.

The question concerning the number of clock-hours actually given to classroom work in psychology was answered for only 77 classes. The number of hours required by these schools ranged from 27 to 412, averaging 88.98, approximately the requirement eighteen years ago when Dr. Whipple reported 90 clock-hours of required work in psychology.

Concerning the percentage of the entire curriculum which was devoted to psychology, only 61 replies were received, with a range from 1 2/3 per cent to 18 per cent, Q_1 4½ per cent, Median 6½ per cent, Q_3 8 1/3 per cent.

To the inquiry whether or not the course was required of all students, 124 replied that it was and 4 that it was not.

Thirty-five reported that their courses were in General Psychology, 72 that theirs were in Educational Psychology, 47 that they were giving a combination of the two. Altogether 154 courses were thus reported. Dr. Whipple found that the typical course required in 1909 was a combination of general and educational psychology. The work of the typical teacher in 1927 was either wholly or largely in educational psychology, with courses in measurements a frequent portion of his teaching load.

TABLE VIIa

LENGTH OF CLASS PERIOD IN CLOCK-HOURS FOR 129 CLASSES IN PSYCHOLOGY IN 89 TEACHER-TRAINING INSTITUTIONS

MINUTES	CLASS PERIODS
40	4
45	20
50	49
53	2
55	35
57	1
60	18

N = 129
Q_1 = 50 minutes
Median = 50 minutes
Q_3 = 55 minutes

TABLE VIIb

LENGTH OF CLASS PERIODS IN CLOCK-HOURS BY SCHOOLS REPORTED BY 129 TEACHERS IN 89 TEACHER-TRAINING INSTITUTIONS

MINUTES	CLASS PERIODS
40	3
45	14
50	36
53	2
55	18
57	1
60	17

N = 91
Q_1 = 50 minutes
Median = 50 minutes
Q_3 = 55 minutes

Textbooks

Data collected from 108 teachers relative to the use of basal textbooks showed that 12 did not use any, but the other 96 teachers reported the use of one or more, as shown in Table VIII which gives the names of the 34 authors of the textbooks. (Gates appears twice because the titles of his two recent books were clearly

TABLE VIII

TEXTBOOKS USED IN PSYCHOLOGY CLASSES IN 1927, BY AUTHORS, REPORTED BY 96 TEACHERS IN PROFESSIONAL SCHOOLS FOR THE PREPARATION OF TEACHERS

RANK	AUTHOR (DATE OF PUBLICATION)	NO. REPORTING
1.	Gates (1923)	48
2.	Woodworth (1921)	19
3.5	Gates (1926) (Elementary Psychology)	8
3.5	Averill (1921)	8
5.	Norsworthy and Whitley (1918)	7
6.	Warren (1922)	5
8.5	Benson, Lough, Skinner, and West (1926)	4
8.5	Starch (1922)	4
8.5	Cameron (1921)	4
8.5	Bolton (1923)	4
12.	Peterson	3
12.	Pillsbury (1922)	3
12.	Betts (1923)	3
16.	Strong (1922)	2
16.	Colvin and Bagley (1913)	2
16.	Thorndike	2
16.	Woodrow	2
16.	Pechstein and McGregor	2
26.5	Ewer (1925)	1
26.5	Waddle	1
26.5	Robinson (1926)	1
26.5	Strayer and Norsworthy	1
26.5	McManus (1916)	1
26.5	Pyle	1
26.5	Breese (1917)	1
26.5	Freeman	1
26.5	Perrin and Klein	1
26.5	Bennett	1
26.5	Wynne	1
26.5	La Rue	1
26.5	Hunter	1
26.5	Reed (1927)	1
26.5	Angell	1
26.5	Cole	1
26.5	O'Shea, (editor 1924)	1

N = 147

designated. This was not done in any other case.) The rank order based on the frequency of mention and the frequency distribution is also shown in this table. An unmistakable tendency to use textbooks of recent production is indicated by this table.

The typical teacher recommended for reference books by ten authors, as is shown in Table IX, which summarizes the reports of the 86 definite, usable responses given concerning this item. Table IX shows the names of the authors, in rank order based upon the frequency of mention, together with the total number of times books by these authors (or the two yearbooks named) were mentioned. The titles of books recommended were not given in every instance, and therefore the table consists of the names of the 102 authors of books (with two yearbooks in addition) cited as reference material. Thorndike's several productions are grouped together under his name. The two books by Gates are listed in the same way, because of the manner in which the replies were made. This procedure was followed in order that the reference materials being used most generally might become a part of the picture, and because this mode of listing was the only one which could be followed consistently without a loss of many of the replies. Table IX shows that certain authors were widely recommended, but that the more recently published books were not being ignored.

In comparison with Dr. Whipple's report, the situation in 1927 was more settled as regards books. Teachers in 1909 maintained that textbooks at that time were "too vague, too abstract, too difficult, too technical in terminology." [1] Quoting further from the report, we read: "The scientific texts are too hard; easy texts are not scientific," and "Those at present on the market are declared to be the 'pedagogical blunders of great scientists who know enough psychology to write a book, but not enough to understand the mind of the high school graduate.'" Again, "The textbook does not resolve any difficulties—it makes them." Only five teachers reporting in 1927 complained of the textbooks then available.

Reference Books and Laboratory Equipment

Data concerning the number of reference books on psychology in the libraries of their schools were supplied by 73 teachers. The numbers given ranged from 10 to 5000; Q_1 78, median 200, Q_3 300. The average number of reference books reported was

[1] Whipple, Guy M., *op. cit.*

TABLE IX

AUTHORS WHOSE BOOKS ARE RECOMMENDED TO STUDENTS AS REFERENCES GIVEN BY 86 TEACHERS OF PSYCHOLOGY IN TEACHER-TRAINING INSTITUTIONS IN 1927

RANK	AUTHOR	NO. REPORTING	RANK	AUTHOR	NO. REPORTING
1	Gates	42	40.5	Pintner	3
2	Woodworth	38	40.5	Strayer and Norsworthy	3
3	Thorndike	36	40.5	Allport	3
4	James	25	40.5	Morgan	3
5	Watson	21	52.5	Groves	2
6	Norsworthy and Whitley	20	52.5	Thomson	2
			52.5	Tredgold	2
7	Starch	19	52.5	Perrin and Klein	2
8	Averill	16	52.5	Dorsey	2
9.5	Robinson and Robinson	15	52.5	Monroe, DeVoss, and Kelly	2
9.5	Pillsbury	15			
11	Warren	13	52.5	Calkins	2
12	La Rue	12	52.5	Neumann	2
13.5	Colvin	11	52.5	Burnham	2
13.5	Benson, Lough, Skinner, and West	11	52.5	Tracy	2
			52.5	Greene	2
15.5	Angell	10	52.5	Phillips	2
15.5	Freeman	10	52.5	Whipple	2
17.5	Pyle	9	52.5	Freud	2
17.5	McDougall	9	52.5	Edwards	2
20	Cameron	8	52.5	Gordon	2
20	Judd	8	52.5	Woodrow	2
20	Bolton	8	52.5	Swift	2
23	Colvin and Bagley	7	83	Hoadley	1
23	Dewey	7	83	Herrick	1
23	Goddard	7	83	Child	1
26.5	Seashore	6	83	Link	1
26.5	Breese	6	83	Burt	1
26.5	Strong	6	83	Read	1
26.5	Titchener	6	83	Ogden	1
30.5	Kirkpatrick	5	83	Sayles	1
30.5	Terman	5	83	McCall	1
30.5	Hunter	5	83	Rugg	1
30.5	Gault and Howard	5	83	Cole	1
35	Waddle	4	83	Yerkes	1
35	Betts	4	83	Royce	1
35	O'Shea (editor)	4	83	Bronner	1
35	Griffith	4	83	Weeks	1
35	Hollingworth	4	83	Tanner	1
40.5	Bagley	3	83	Saxby	1
40.5	Miller	3	83	Conklin	1

TABLE IX—(*Continued*)

Rank	Author	No. Reporting	Rank	Author	No. Reporting
83	Hall	1	83	Boraas	1
83	Ladd and Woodworth	1	83	Pechstein and McGregor	1
83	Stern	1	83	Chapman and Counts	1
83	Jung	1	83	Blackhurst	1
83	Washburn	1	83	Kennedy and Frasier	1
83	Huey	1	83	Gesell	1
83	Stiles	1	83	Barr	1
83	Lyman	1	83	Sandiford	1
83	Baldwin	1	83	Kitson	1
83	Brown	1	83	Kornhauser	1
83	Davis	1	83	23rd Yearbook	1
83	Halleck	1	83	Chicago University Yearbook (1925)	1
83	Overstreet	1			

142; many of those replying stated, however, that their answers were estimated, not verified, numbers.

Dr. Whipple reported scanty library facilities in 1909. Evidently the trend is toward a more liberal provision for wide reading from American authors.

The reports on laboratory facilities at the disposal of the teacher of psychology contained responses from 105 teachers, 56 of whom said they had no such facilities and 20 that they had laboratories. In some instances these laboratories were described as being "up-to-date," "comparatively complete." In other instances they were said to consist of "8 or 10 pieces," "$1200 worth," or "$1000 worth." One said, "Will have one in 1927-28." Nine mentioned the training school, and 20 others gave indefinite answers, such as, "Very little," "Make my own."

A few reported the amount of money which had been appropriated by the school for laboratory work. Four reported that annual appropriations were made to carry on this kind of work. The range for this item, therefore, is from nothing to $10,000 + annual appropriations, and the typical teacher has no laboratory at his disposal.

Original Work

The replies to a question about original work being done by the instructor were sent in by 117 teachers, 32 of whom reported

that they were doing no original work. Table X is a summary of the statements made to indicate the nature of whatever original work was being done by the instructor. Grouped very roughly it shows that the psychology of the learning processes was being studied by 22 instructors, probably in connection with their classes in psychology; objective measurement by 20; work of an experimental nature was being done by 23; "research" by 5; work in the training school by 10; productive work in the form of writing by 4.

TABLE X

ORIGINAL WORK BEING DONE BY 85 INSTRUCTORS IN PSYCHOLOGY IN 58 PROFESSIONAL SCHOOLS FOR TEACHERS IN 1927

	NUMBER OF TEACHERS REPORTING	PER CENT OF TOTAL NUMBER OF TEACHERS REPORTING
Work of an experimental nature	23	27.0
Psychology of the learning processes	22	26.0
Objective measurement	20	23.5
Work in the training school	10	12.0
Research	5	6.0
Productive work in the form of writing	4	4.7

No attempt was made to obtain data concerning experiments being made, but there is evidence to show that teachers of psychology in the teacher-training institutions controlled by the state are usually confining themselves to the strictly professional applications within their field. Very rarely does one venture into regions not essentially practical, though the immediate values in some of the procedures might have to be pointed out to the usual student of psychology in normal schools. Possibly time is taken for consideration of the findings in order that the psychology students may be led to understand the value of such work, though this was not stated in replies given to questions asked.

The study of the function of laboratory work in educational psychology made by O. B. Douglas [1] showed that in the 65 institutions of college rank replying to questions sent out by him 55

[1] Douglas, O. B., "The Present Status of the Introductory Course in Educational Psychology in American Institutions of Learning," *Journal of Educational Psychology*, Vol. XVI, No. 6, September, 1925.

reported that they were carrying on experimental work in educational psychology. The study indicated that testing for individual differences ranked first in the list of original experimentation in the four-year college course as reported by Douglas. Re-grouping the experiments roughly, however, would show that experiments in learning held first place by a considerable margin.

The suggestions made by teachers of psychology in 1927 are in harmony with an explanation offered by Douglas, who pointed out that in some of the 55 colleges reporting on the question concerning where the laboratory work was done there was no laboratory, and in other cases there was only one laboratory instructor provided for both the department of psychology and of education. A further difficulty to which Douglas called attention was that of devising experiments which might be helpful to the solution of classroom problems.

Summarizing the findings concerning the attempts being made to carry on original work, the writer finds that indications are that the typical teacher is trying to do some original work with no budget to cover the expenses involved. This work is either in the psychology of the learning process, or in the objective measurement of traits, with occasional experimentation with or without laboratory apparatus, and, less frequently, work in the practice schools accessible to the classes in psychology and measurement.

Summary of Difficulties Cited

The greatest difficulties cited by the 85 teachers reporting any are summarized in Table XI. The difficulty most frequently mentioned was the shortness of time allotted to their work. A few stated that there was too much work required to be covered in a one-semester course. Another variation of the same theme was "Insufficient time to give adequate instruction." "Little time for research," "Lack of time for experimentation and laboratory work," and "Try to accomplish too much in the time allotted" are expressions of the opinions of teachers of psychology, as revealed by this study. Another difficulty prominent enough to be noticed is a lack of laboratory equipment. The typical teacher of psychology in professional schools for the preparation of teachers for elementary schools has not yet begun to use the practice schools for his laboratory, although such a school is the only one in which the great majority of his students of psychology will ever work or have any opportunity to test the theories studied

TABLE XI

GREATEST DIFFICULTIES MET BY 85 TEACHERS OF PSYCHOLOGY IN PROFESSIONAL SCHOOLS FOR TEACHERS IN 1927

	No. Reporting	Per Cent of Total
To teach satisfactorily in the time allowed (only one semester)	22	26.0
To teach the subject without enough equipment (laboratory)	20	23.5
To teach classes too large in size	12	14.0
To carry the service-load assigned (too many subjects, etc.)	12	14.0
To teach students lacking the scientific attitude	11	13.0
To teach too immature students	10	12.0
To teach with inadequate library facilities	6	7.0
To make the work practical, with applications closely related to teaching	6	7.0
To present this entirely new subject to students really unable to grasp its meanings	5	6.0
To teach without satisfactory textbooks	5	6.0
To teach poorly prepared students. (Certain prerequisites necessary)	5	6.0
To teach students unfamiliar with the mode of thought	4	4.7
To secure cheerful coöperation from public schools for practical work	3	3.5
To attain objectives of the subject when other subject-matter specialists are assigned to teach it	2	2.3
To select the right subject-matter	2	2.3
To present the subject to students of uneven intelligence levels grouped together	2	2.3
To conduct laboratory work in insufficient space	2	2.3
To teach students not possessing the vocabulary of the subject	2	2.3
To present the subject to students of uneven preparation grouped together	1	1.2
To interpret the conflicting statements of authors	1	1.2
To teach without adequate information	1	1.2
To teach students lacking reading skills	1	1.2
To keep the courses within the field of psychology. (Tend to become courses in education)	1	1.2
To teach pupils not knowing how to study effectively	1	1.2
To secure objectivity without becoming a structuralist	1	1.2
To make ideas dynamic	1	1.2
To get short, direct experiments for classroom illustrations of principles	1	1.2
To obtain desired results though unable to require assignments from the practice-teaching group	1	1.2
To get students to apply theory to practice	1	1.2
To select essentials from the masses of available material	1	1.2
To provide for sufficient reference work because of too heavy roster	1	1.2
To arouse discontent with theorizing. (To change to scientific technique)	1	1.2
To get best results with course placed in first year. (Should be in second year)	1	1.2
To cover all of the material	1	1.2
To make a professional appeal	1	1.2
To work effectively without clerical help	1	1.2

while under training for his profession. This failure to use the means at hand is noteworthy, too, in connection with the rising costs of state-supported professional schools for teachers, and in spite of the fact that, after the state has provided for the training of teachers for its schools, the median period of service by these teachers is only 9.5 years, as reported in the study made by Benson [1] in 1922.

The aims of the typical teacher are variously stated. They concern the students, both in their personal lives and in their contact with children. There is a tendency to seek to encourage the scientific attitude of mind. It is evident, too, that the typical teacher of psychology has great faith in its ability to transform students into efficient teachers even though the training school is not being used to demonstrate processes and theories. Table XII is a summary of the aims reported by the 88 teachers who supplied the data for this item. It is worthy of note that this study discloses that teachers of psychology aim to accomplish the three purposes which Professor William C. Bagley designated as being those for which the study of psychology should be undertaken: Influencing the attitude of mind of teachers; short-cutting the process of preparation for meeting teaching situations; and training students in the study of children. Obviously there is great variability among teachers of psychology as to the objectives which should be attained through the teaching of that subject. A study of the activities by means of which the attainment of these aims is sought might render needed service in producing valuable changes in this sector of the field of teacher-preparation.

Determination of Content

One hundred ten teachers furnished data pertinent to the way the content of the courses in psychology is determined, 16 made no response, and 3 made responses which gave no indication of exact meaning. Table XIII is a summary of these responses, and shows that 65 of these teachers have the sole or a partial choice of the content of the courses they are teaching. The typical teacher, therefore, has an opportunity to profit by his graduate study and his years of teaching in the exercise of his judgment in determining the nature of the subject-matter to be presented to his students.

[1] Benson, Charles E., *Output of Professional Schools for Teachers*, p. 56. Warwick and York, Baltimore, Md., 1922.

TABLE XII

AIMS OF 88 TEACHERS OF PSYCHOLOGY IN NORMAL SCHOOLS AND TEACHERS COLLEGES (1927)

	No. Reporting	Per Cent of Total
To teach pupils the application of the laws of learning	18	20.0
To acquaint students with basic facts preparatory to their application	15	17.0
To get students to understand the causes of various kinds of behavior in children	14	16.0
To establish basis for understanding human life	11	12.5
To help students attain the scientific attitude for teaching	8	9.0
To give students a working knowledge of psychology in their own lives	6	6.8
To aid students to acquire the vocabulary of psychology that they may continue reading in the field	6	6.8
To help students to know child life and to appreciate it	5	5.6
To give psychological insight to enable students to use psychology when teaching	5	5.6
To furnish a basis for teaching methods	5	5.6
To lead students to apply knowledge in teaching	5	5.6
To furnish students a working acquaintance with and outlook on results of scientific psychology	5	5.6
To get across vital essentials teachers should know	4	4.5
To teach students to understand the learning process	3	3.4
To help students to use their minds better to live	3	3.4
To habituate students to applying laws of learning to a teaching situation	3	3.4
To develop on the part of young teachers an analytic attitude toward every plan they make and every technique they use	3	3.4
To teach the "How" and the "Why" of education	3	3.4
To contribute to the general culture of students	2	2.2
To create tolerance and open-mindedness	2	2.2
To build psychological concepts	2	2.2
To establish a basis for understanding of education	2	2.2
To help pupils better to make adjustments	2	2.2
To enable students to apply the psychological laws that govern teaching	2	2.2
To lay a foundation for better teaching	2	2.2
To coöperate with the community	2	2.2
To give the psychological basis for a study of the principles of teaching and for practice teaching	2	2.2
To equip students with the facts that will help them to teach efficiently	2	2.2
To teach students to understand the laws of mental development	2	2.2
To help students to acquire the general power to handle children in the classroom	2	2.2
To teach pupils how to study	2	2.2

TABLE XII—(*Continued*)

	No. Reporting	Per Cent of Total Aims
To train students to do scientific psychology work, to find facts for themselves, and to evaluate data	1	1.1
To teach pupils how we build meanings	1	1.1
To teach pupils to understand habits	1	1.1
To give an appreciation of psychology as a science	1	1.1
To help pupils to be better prepared to meet future school problems	1	1.1
To give students a working knowledge of the nervous system	1	1.1
To teach students to understand teaching	1	1.1
To improve teaching by applying principles of psychology	1	1.1
To develop interest in psychology	1	1.1
To develop the student's own mind	1	1.1
To give insight into modern methods	1	1.1
To make more intelligent and sympathetic teachers	1	1.1
To inspire the best teachers to productive scholarship	1	1.1
To teach students how to make desirable changes in children	1	1.1
To acquaint students with the leading psychologists	1	1.1
To lead the students to further reading and honest thinking	1	1.1
To give a foundation for educational theory	1	1.1
To teach students to recognize the teacher's responsibility in child nurture	1	1.1
To teach students to know the physical and mental characteristics of children at different age levels as a basis for teaching	1	1.1
To give a broad outline of the subject	1	1.1
To understand children to help them to solve problems	1	1.1
To connect the subject with actual practice and life	1	1.1
To develop attitudes for the needs of different groups	1	1.1
To give students an understanding of their own behavior to better enjoy life	1	1.1
To continue study to make some contribution	1	1.1
To supply a means of evaluating school procedures	1	1.1
To give principles and to teach students to put them into practice	1	1.1
To interpret educational methods and values	1	1.1
To build proper attitudes in students	1	1.1
To teach students to understand the causes of individual differences and deviations	1	1.1
To transmit the knowledge of mental life and processes	1	1.1
To acquaint students with consciousness	1	1.1
To present a rational view of man as a part of nature and in all things subject to its laws	1	1.1
To help students to understand themselves better in order to be more sympathetic with the behavior of others	1	1.1
To further the general education of students	1	1.1

TABLE XIII

How Content of Courses in Psychology Is Determined in Certain Professional Schools for Teachers as Reported by 110 Instructors

	No. Reporting	Per Cent of Total Number
By the state	14	18.0
a. Course of study	4	5.2
b. Board of education	4	5.2
c. Entirely	2	2.6
d. Largely, teacher making adaptations	1	1.3
e. Course of study and opinions based upon training	1	1.3
f. Course of study and requirements of principal of school	1	1.3
g. Conference of Board of Normal School Presidents	1	1.3
By a conference of instructors	14	18.0
By the teacher of the course	14	18.0
By the needs of students	14	18.0
To meet aims stated	7	9.0
By the instructor, guided by the textbook used	4	5.2
On the basis of needs of teachers	2	2.6
By the progress of students	1	1.3
By what seems of benefit to teachers	1	1.3
By the interests of instructor	1	1.3
Coöperatively with other instructors in other subjects	1	1.3
By usable principles	1	1.3
By a certain set of essentials mostly determined by the teacher	1	1.3
By the instructor with approval of principal	1	1.3
By the principal and instructor, based upon experiences	1	1.3
Total	77	99.2

Interest in Subject

Ninety per cent or more of the students exhibit interest in the subject, as revealed by the 113 responses made. Table XIV shows the frequency distribution of the replies as given. The high per cent reported indicates that the typical teacher of psychology was not forced to contend with mental inertia on the part of the larger portion of his classes in 1927.

Thirty-nine teachers ignored the request for information about the attitude of those in their classes who were not interested. Ninety responses were made, 6 of which were ambiguous. Table XV condenses the statements made by the 84 teachers who gave clear answers to the question. Of these statements, 21 may be taken to imply that the students who were not actively interested

TABLE XIV

PER CENT OF CLASS INTERESTED IN THE STUDY OF PSYCHOLOGY IN PROFESSIONAL SCHOOLS FOR PREPARATION OF TEACHERS AS REPORTED BY 113 INSTRUCTORS IN PSYCHOLOGY IN 1927

	No. Reporting	Per Cent of Total
100%	24	21.0
"Roughly 100%	4	3.5
"Practically all"	2	1.75
"All most of the time, but only 5% enough"	1	.87
"All most of the time, some all of the time"	1	.87
"Nearly all"	1	.87
"Large majority"	1	.87
99%	1	.87
98%	1	.87
95–100%	1	.87
95%	4	3.50
90–95%	1	.87
"90% or more"	4	3.50
90%	18	15.87
85–90%	2	1.75
85%	2	1.75
"Probably 85%"	1	.87
80–90%	3	2.63
80%	5	4.38
75–85%	1	.87
75%	7	6.14
75% or more	1	.87
67–75%	1	.87
66⅔%	1	.87
50–75%	1	.87
"10% at beginning, 75% at end"	1	.87
50%	4	3.50
40%	1	.87
25–33⅓%	1	.87
"Probably 25%"	1	.87
"About 10%"	1	.87
"75% at first, ⅓ or ½ of these later"	1	.87
"High in some, average in some, poor in some"	5	4.38
"All that can get it"	2	1.75
"Good many at beginning, few at end"	1	.87
"No way to ascertain"	1	.87
Ambiguous answers and incomprehensible replies	5	4.38
"No difficulty in arousing interest, but 'carry over' difficult"	1	.87
Total	114	99.99

TABLE XV

ATTITUDES OF STUDENTS NOT INTERESTED IN THE STUDY OF PSYCHOLOGY AS REPORTED BY 84 INSTRUCTORS IN 1927

	No. Reporting	Per Cent of Total
"Take course because it is required"	16	15.0
"Not interested" (9), "Indifferent" (8), "Passive" (3), "Bored" (3)	23	21.0
"Do not care for the subject" (1), "Dry subject" (1), "Subject no good" (1)	3	2.8
"Fail to see significance" (2), "Take course for credit" (1)	3	2.8
"Lethargic" (2), "Dull" (2), "Lazy" (1)	5	4.6
"Bored or frightened" (1), "Afraid" (1), "Bored or out of depth" (1)	3	2.8
"Lack background" (2), "Unprepared" (1)	3	2.8
"Discouragement"	2	1.9
"Try to memorize words of book" (1), "Get the words" (1)	2	1.9
"Not good students" (1), "Poor study habits" (1), "Lack of general attention" (1)	3	2.8
"Immature" (1), "Immature attitude toward life" (1)	2	1.9
"Inattentive" (2), "Hear nothing" (1)	3	2.8
"Satisfactory attitude but lack of depth" (1), "Struggling to understand" (1)	2	1.9
"Too dull to enjoy college education"	1	.9
"General professional indifference"	1	.9
"Subject is too hard"	1	.9
"Some object to educational psychology"	1	.9
"Concerned with grade" (2), "Grade crazy" (1)	3	2.8
"Entertained" (1)	1	.9
"Endure it"	1	.9
"Politely attentive" (1), "Remain attentive" (1), "Perfunctory" (1)	3	2.8
"Willing to absorb what they can without effort"	1	.9
"Participate but do not apply"	1	.9
"Usually drop the course"	1	.9
"Occasional spurts of interest"	1	.9
"Vary widely"	1	.9
"Probably have greater interest in other subjects"	1	.9
"Too much outside activity"	1	.9
"No loafers" (3), "Good" (3), "None entirely indifferent" (1)	7	6.5
"Few are indifferent" (5), "Few show lack of interest (7)	12	11.1
Total	108	99.9

were not wholly responsible for their attitudes toward the subject. The typical teacher, however, has in his psychology classes a few students who show undesirable attitudes either toward the subject or toward life in general. This number is not a large percentage of the class, since 90 per cent or more show, at the same time, an unmistakable interest in psychology.

Summary

A summary of this portion of the study shows the following facts:

1. An advancement toward higher academic standing on the part of teachers of psychology in professional schools for the preparation of teachers for elementary schools.

2. A tendency to allow specialization in psychology and measurement; additional courses, if any, given in the closely allied field of education.

3. Evidence that classes are smaller than in 1910 and that large classes are divided into sections.

4. A choice of 3 periods of class work per week.

5. The making of the class period one clock-hour in length, with possibly 10 minutes allowed for passing of classes.

6. The requirement of at least one course in psychology, either educational or a combination of educational and general.

7. The use of basal textbooks published within the past decade, largely, however, within the past six years.

8. The provision of more generous library facilities than in 1909.

9. Attempts to do original work, chiefly in the field of educational psychology.

10. The selection of the content of courses by the teacher or teachers of the subject.

11. Greater interest in the subject on the part of the pre-service teacher.

12. Lack of coördination between the work in psychology and practice in the training school.

CHAPTER III

PRESENT PRACTICE IN THE TEACHING OF PSYCHOLOGY

As Revealed in Current Catalogs of 110 Professional Schools for the Preparation of Teachers of Elementary Schools

Seeking further for data which might aid in answering some of the questions which are being asked, an analysis was made of recent catalogs of 110 professional schools for the preparation of teachers as listed in the Educational Directory of the Department of the Interior, Bureau of Education Bulletin (1926), pp. 80-83. A study was made of the catalogs of 71 state normal schools located in twenty-three states, of 37 degree-granting teachers colleges in nineteen states, and of 2 city training schools in two states, a total of 110 institutions. Thirty-one of the state normal schools, 17 of the teachers colleges, and 1 of the city training schools included in this group were among those whose teachers of psychology had answered the inquiry already reported, of June, 1927. A comparison of the items selected for the analysis of the catalogs with identical items covered by the inquiry revealed a close agreement in the statements of conditions. The inquiry, however, gave definite statements, while the majority of the statements in the catalogs were suggestive to the student rather than explicit. Another difficulty, which has been referred to earlier, is the diversity of data and incompleteness of desirable information in these annual catalogs, which, when accompanied by variations in the length of school years, in the subdivisions of school years, and in the requirements made by different schools, render a search for comparable data through this channel rather unprofitable, if the time and clerical work necessary are considered.

From the analysis of current catalogs data were secured to show what courses are being offered in the several schools; which, if any, schools make one or more courses in psychology a require-

ment for the school diploma; the nature of the content of the required courses; and the extent to which the psychology of special subjects is being given as a portion of the professionalized courses in these special subjects.

Tables XVIA to XVII summarize the titles of courses given in the catalogs of the schools chosen for study. This table shows that the course most frequently listed is called *Educational Psychology*, and that more than one course by that name is offered in each of several schools. Institutions ranking as teachers colleges offer, on an average, a greater number of courses in psychology

TABLE XVI

COURSES IN PSYCHOLOGY AS LISTED IN CATALOGS OF 110 INSTITUTIONS FOR THE PREPARATION OF TEACHERS

A. Educational Psychology

TITLE OF COURSE	TEACHERS COLLEGES *	NORMAL SCHOOLS	TOTAL
1. Educational Psychology	25	49	74
2. Psychology of Learning	6	15	21
3. The Learning Process	3	3	6
4. Elementary Educational Psychology	1	5	6
5. Psychology and Education of Exceptional Children	6	0	6
6. Exceptional Children	3	1	4
7. Advanced Educational Psychology	4	4	8
8. Introduction to Educational Psychology	2	1	3
9. Introductory Educational Psychology	1	1	2
10. Special Talents and Defects	1	0	1
11. Psychology of Sub-normal Children	0	1	1
12. Special Problems in Educational Psychology	0	1	1
13. Educational Psychology for High School Teachers	1	0	1
14. Educational Psychology for Elementary School Teachers	1	0	1
15. Educational Psychology for Primary Teachers	0	1	1
16. Educational Psychology for Intermediate Grade Teachers	0	1	1
17. Educational Psychology for Upper Grade and Junior High School Teachers	0	1	1
18. Pedagogical Psychology	1	0	1
19. Theory of Education	1	0	1
	56	84	140

* Ranking as teachers colleges in 1926.

than do the normal schools. Not every school requires a course in psychology, according to a literal interpretation of the catalogs studied. Ten of the schools studied do not have the requirement. Twenty of the schools require one course, 57 require two courses, 17 require three, 6 require four, 1 requires six courses. Teachers colleges tend to require more work in psychology and measurements than do the normal schools.

TABLE XVI—(*Continued*)

B. Measurements

Title of Course	Teachers Colleges	Normal Schools	Total
1. Educational Measurements	8	15	23
2. Tests and Measurements	6	17	23
3. Educational Tests and Scales	1	10	11
4. Educational Tests and Measurements	1	8	9
5. Mental Tests	4	1	5
6. Measurement of Intelligence	3	2	5
7. Mental Measurement	3	1	4
8. Advanced Educational Tests and Measurements	2	1	3
9. Intelligence Testing	2	1	3
10. Applied Psychology and Introduction to Study of Measurement	2	0	2
11. Educational Tests	2	0	2
12. Advanced Educational Measurement	1	0	1
13. Educational Tests and Measurements for High Schools	1	1	2
14. Measurement of Mental Ability	0	1	1
15. Measurements	1	0	1
16. General Pedagogy	1	0	1
17. Mental Tests and Measurements	1	0	1
18. Theory and Administration of Intelligence Tests	0	1	1
19. Mental and Educational Tests	1	0	1
20. Introduction to Mental Tests	1	0	1
21. Advanced Mental Testing	1	0	1
22. Educational Tests and Measurements for Elementary Schools	1	0	1
23. Psychological Measurements	1	0	1
24. Individual Mental Testing	1	0	1
25. Psycho-Physical Measurement	1	0	1
26. Measurement of Elementary School Achievement	0	1	1
	46	60	106

TABLE XVI—(*Continued*)

C. General Psychology

Title of Course	Teachers Colleges	Normal Schools	Total
1. Psychology	18	32	50
2. General Psychology	9	11	20
3. Elementary Psychology	4	7	11
4. Introductory Psychology	5	2	7
5. Advanced Psychology	3	2	5
6. Introduction to Psychology	2	0	2
	41	54	95

D. Child Study

Title of Course	Teachers Colleges	Normal Schools	Total
1. Child Psychology	15	20	35
2. Child Study	9	4	13
3. Psychology of Child Study	0	12	12
4. Psychology of Childhood	5	5	10
5. Genetic Psychology	3	2	5
6. Child Hygiene	1	0	1
7. Child Development	1	0	1
8. Psychology of the Kindergarten-Primary Child	1	0	1
	35	43	78

E. Adolescence

Title of Course	Teachers Colleges	Normal Schools	Total
1. Psychology of Adolescence	11	16	27
2. Psychology and Training of Adolescence	1	12	13
3. Adolescent Psychology	2	5	7
4. Adolescent Age	1	0	1
5. Psychology of the Junior High School Child	1	0	1
	16	33	49

TABLE XVI—(*Continued*)

F. Subject Matter

Title of Course	Teachers Colleges	Normal Schools	Total
1. Psychology of the High School Subjects	5	2	7
2. Psychology of the Elementary School Subjects	2	4	6
3. Psychology and Pedagogy of High School Subjects	4	0	4
4. Psychology of Special Subjects	2	2	4
5. Psychology and Pedagogy of Penmanship	4	0	4
6. Psychology of the Common Branches	0	3	3
7. Psychology of Reading	1	1	2
8. Psychology of Music	1	0	1
9. Psychology of Subject Matter	0	1	1
10. Child Study and Psychology of Subject Matter and Methods of Lower Grades	1	0	1
11. Child Study and Psychology of Subject Matter and Methods of Upper Grades	1	0	1
12. Psychology of School Subjects	1	0	1
13. Psychology of Common School Subjects	1	0	1
14. Psychology of Elementary School Subjects and Mental Measurements	0	1	1
15. Psychology for High Schools	1	0	1
	24	14	38

G. Abnormal and Clinical

Title of Course	Teachers Colleges	Normal Schools	Total
1. Abnormal Psychology	8	0	8
2. Clinical Psychology	3	1	4
3. Behavior Problems in School Children	0	1	1
4. Psycho-Clinical Practice	1	0	1
5. Psychological Clinic	1	0	1
6. Clinical Field Work	0	1	1
7. Clinical Tests and Measurements	0	1	1
8. Defective Children	0	1	1
9. Special Problems in Abnormal Psychology	0	1	1
	13	6	19

TABLE XVI—(*Continued*)

H. Statistics

Title of Course	Teachers Colleges	Normal Schools	Total
1. Elementary Educational Statistics	1	0	1
2. Statistical Methods	1	0	1
3. Statistics for Teachers	1	0	1
4. Statistics	1	0	1
5. Educational Statistics	0	1	1
	4	1	5

I. Social

Title of Course	Teachers Colleges	Normal Schools	Total
1. Social Psychology	10	3	13
2. Social Psychology and Social Control	1	0	1
3. Psychology of Social Relations	0	1	1
4. Social Development	1	0	1
	12	4	16

J. Individual Differences

Title of Course	Teachers Colleges	Normal Schools	Total
1. Individual Differences	1	3	4
2. Individual Mental Differences	0	1	1
3. Differential Psychology	0	1	1
	1	5	6

TABLE XVI—(*Continued*) *K. Miscellaneous*

Title of Course	Teachers Colleges	Normal Schools	Total
1. Physiological Psychology	0	13	13
2. Applied Psychology	1	2	3
3. Experimental Psychology	2	1	3
4. Vocational Psychology	2	0	2
5. Psychology of Religion	2	0	2
6. Problems of Modern Psychology	1	1	2
7. Systematic Psychology	1	1	2
8. Conference, Seminar, and Laboratory	1	1	2
9. Business Psychology	1	1	2
10. Mental Hygiene	1	1	2
11. Personality, Character, and Mental Hygiene	0	1	1
12. Current Popular Psychology	0	1	1
13. Industrial Psychology	1	0	1
14. Psychology of Leadership	1	0	1
15. Psychology of Character	1	0	1
16. Speech Defects	1	0	1
17. Psychology of Speech	1	0	1
18. Psychology of Business Administration	1	0	1
19. Experimental Education	0	1	1
20. Practical Experimentation	1	0	1
21. Psychology and Personal Efficiency	0	1	1
22. Theory of Education	1	0	1
	20	25	45

L. Nature of Content of Groups of Courses Listed in Table XVI A-K

Course	No. of Titles	Teachers Colleges	Normal Schools	Total
Educational Psychology	19	56	84	140
Measurements	26	46	60	106
General Psychology	6	41	54	95
Child Study	8	35	43	78
Adolescence	5	16	33	49
Subject Matter	15	24	14	38
Abnormal and Clinical Psychology	9	13	6	19
Social Psychology	4	12	4	16
Individual Differences	3	1	5	6
Statistics	5	4	1	5
Miscellaneous	22	20	25	45
	122	268	329	597

The average number of courses offered in these 110 schools is 5.42. Compared with those of the study reported by Miss Marion Macdonald,[1] some items are found to vary, though not greatly. From that study, which was made of catalogs of a later issue in a few cases, 72 of the institutions studied were found to give four-year courses, out of 155 institutions represented. In that study, the average number of courses offered was 5.7, not a significant difference from the 5.42 found in the present study.

Descriptions of the required courses in the catalogs under present consideration show unmistakably that psychology as applied to education is the predominating psychology course. Schools requiring but one course indicate this by such statements as: "This course presents the accepted facts of psychology with the special purpose of applying them to the problems of learning, teaching, and personal development"; "Purpose is to increase the efficiency of the individual, especially as a student and as a teacher"; "Special application to the problems of the schoolroom."

These courses are said to be taught by lectures, classroom discussions, reports, laboratory experiments, demonstrations (some with children), study of textbooks, laboratory exercises, assigned readings. A study of textbooks is indicated to be the prevailing practice.

The curricula of the several schools varied as to the number of electives offered. On the whole, the schools in New England and New York State appear to prescribe the courses students may take.

An indication of change in procedures is seen in the teaching of the psychology of the subject in connection with the work in special subjects. Of the schools studied, those in Connecticut, Pennsylvania, and Missouri seem to offer much of their work in this way.

The writer desired to investigate the amount of "service load" being required of teachers of psychology. Dr. Lynn B. McMullen, now president of the State Normal School at Billings, Montana, very generously placed at her disposal the entire returns of the intensive research he made in 1924.[2] "The median student hours (the student hours equal the number of students in each class

[1] Macdonald, Marion E., "A Catalog Study of Courses in Psychology in State Normal Schools and Teachers' Colleges," *Educational Administration and Supervision*, Vol. XIII, No. 4, pp. 272-282, April, 1927.

[2] McMullen, Lynn B., *The Service Load in Teacher-Training Institutions of the United States*. Bureau of Publications, Teachers College, Columbia University, New York City, 1927.

multiplied by the number of periods per week)"[1] of teachers of the group called Educational Theory (in which were included the teachers giving all of the courses in psychology and measurements),[2] was 483. Using the original returns sent by these teachers, the writer found that, while the median for all of the teachers in the Educational Theory group was 483, the median for teachers of psychology and measurements was 456.5 student hours. Separating the institutions into two groups, teachers colleges and normal schools, it was found by the writer that the median for the teachers colleges was 456.5 student hours, but for the normal school group it was 542 hours. The average "student-hour-load," however, was 610 for the entire group of 94 teachers of psychology, or 58.3 hours for the 80 who were teaching in teachers colleges, and 756.3 hours for the 14 teaching in the normal schools. The range of "student-hour-load" in teachers colleges was 136-1746. In the normal schools the range was 192-4212. Grouped together, the range for the 94 teachers was 136-4212 student-hours.

Continuing a study along the lines Dr. McMullen followed in determining the service load of these teachers,[3] by using his formula (3.13 x hours per week of class teaching), it was found by the writer that the median service load of the 94 teachers of psychology was 50.08 hours, in comparison with the 41.3 hours reported by McMullen for the theory group. The median for the 80 teachers in the institutions ranking as teachers colleges was 50.08 hours, while for those teaching in the normal schools the median was 46.9 hours. The average number of hours of service load for teachers in the teachers colleges was 49.45, in the normal schools 46.8, and, taken as one group, the average service load was 48.85 hours. McMullen reported only the median service loads of all teachers. From a study of Table XXXII in McMullen's study,[4] in which a comparison of service loads is now made, it will be seen that the teachers giving the courses in psychology carried the greatest service load of any. The median for the group as a whole was 50.08 hours as compared with that of teachers of Manual Arts, the next highest, with a median of 44.1, and as compared with that of the entire Edu-

[1] McMullen, L. B., *op. cit.*, p. 56.
[2] *Ibid.*, p. 12.
[3] *Ibid.*, p. 62.
[4] *Ibid.*, p. 64.

cational Theory group, which had a median of 41.3 hours. The tendency, therefore, appears to be to require teachers of psychology and measurement to carry a service load much heavier than other teachers carry in each of the schools studied, not excepting any.

The catalogs were studied to check findings relative to the sex of the teachers of psychology. Catalogs of 70 schools, 24 of which were teachers colleges and 36 normal schools, were taken at random. Several of these did not specify the sex of the teacher of psychology. The majority, however, did so indicate. In all there were 39 men teachers and 23 women teachers. This showed a somewhat larger percentage of women (37 per cent) teaching psychology and measurements than was shown by other portions of the study. Dr. McMullen's returns from 56 schools brought responses from 77 men and 26 women (26 per cent) teaching these courses in 1924; but returns in the McMullen study did not purport to cover all the teachers in any one school coöperating.

Comparing the academic standing of each group, it was seen that of those teaching both psychology and measurements, the greater number holding the degree of Doctor of Philosophy were men. This proportion was also true of those holding the Master of Arts degree. There were more women than men teaching who had no degree or who had but the Bachelor's degree.

The percentage of men teachers of psychology was higher in the teachers colleges than in the normal schools. Schools in the East, particularly the normal schools, showed a greater percentage of women teaching some or all of the work in psychology and measurements than those of the other sections of the United States.

There appeared to be a tendency to include the courses in psychology and measurements within the department of education. In many catalogs no distinction was made between the two fields.

The study of current catalogs, therefore, shows that there is a tendency to require two courses in psychology, or one in psychology and one in measurement; and a tendency for teachers colleges to require a greater number of courses than do the normal schools. The work in psychology is largely educational. The tendency is to use a basal textbook supplemented by library readings.

The service load of teachers of psychology appears to be the heaviest carried by any one group of teachers in the institutions reported in McMullen's study of 1924.

As Shown by the Inquiry Addressed to Teachers of Psychology in 1927

The Inquiry referred to in Chapter II, was devised to secure information which would throw light on the prevailing practices in the teaching of psychology with regard to the content of courses and the conduct of teaching.

The question in regard to basal textbooks used, referred to in the preceding chapter, provided the material here used in coming to a conclusion as to the nature of the content being offered in courses in psychology in professional schools for the preparation of teachers of elementary schools in 1927. Since the use of a basal text was reported by 96 of the total number of 129 teachers (only 108 of whom actually replied to this question), it seems safe to assume that the leading ten textbooks used by these teachers determine, to a large extent, the material offered for study and application. These ten textbooks were analyzed to provide for a comparison of their contents.

Topics listed in the indexes of the textbooks were compiled in an alphabetical list to secure an all-inclusive list of the topics treated by the several writers of these books. This all-inclusive list was then condensed into one consisting of the larger topics presented. This list is only approximately correct, however, since certain difficulties arise whenever any attempt is made to standardize the terminology used in texts. For example, the topic of "Attention" is given extended treatment in some of the books analyzed, but only casual mention in one of them.

In some of the textbooks, each main topic is treated by itself to give a clear-cut presentation of that one subdivision of the subject, but in other books the style of treatment approaches that known as "spiral," wherein a topic or subtopic appears again and again, often in company with one or more other topics or subtopics. The last mode of treatment makes it manifestly impossible to compile a non-overlapping list which would be all-inclusive of the content of these ten textbooks for the purposes of a mathematical computation of the space given each topic.

Since, however, it is not the purpose of the writer either to evaluate any textbook or to advertise one or the other of them, the items listed have been used only to serve her original purpose, which is to discover the nature of the content being offered in

courses in psychology in institutions for prospective teachers for elementary schools.

Having compiled the all-inclusive list of topics given in the several indexes, and having then reduced this list to as brief a compass as possible in the effort to secure the least overlapping but all-inclusive list, the content of each book was analyzed, and the space given to each topic was estimated on the basis of the number of lines devoted to each topic. This number was reduced to a percentage of the content of the entire book. The content of each book was considered to include only those pages and parts of pages which contained the author's presentation of the subject-matter, including diagrams, cuts, etc., but excluding exercises and references to further reading. Table XVII gives the summary of the topics offered in the ten most frequently used textbooks in use in psychology in professional schools for the preparation of teachers for elementary schools in the year 1927. Each textbook is designated by a letter placed at the top of the column containing the per cents of the entire book devoted to the several topics listed. It must be borne in mind that these per cents are, in some instances, only approximately correct, due to these facts: First, the authors here represented are not in full accord as to the classification of certain topics. Second, there is a great overlapping in each of several of the books due to the mode of presentation chosen by the authors.

The data presented seem to show that certain topics are being given emphasis, if the per cent as determined mathematically can be used as a criterion. In relatively marked prominence are the topics: Emotions, Individual Differences, Intelligence and Its Measurement, Learning (including Habit-formation), the Central Nervous System and Its Operations through the Organs of Response, Perception, Thinking, Native Traits, and Urges. (The last-named topic serves to include Dominant Human Urges, Attitudes, States of Readiness, and similar topics, which are given differing treatments in the textbooks analyzed.) It seems fair, therefore, to assume that Table XVII presents a general idea of the nature of the topics being considered in a majority of the teacher-training institutions in the United States. The topics receiving the greatest amount of space in the leading ten textbooks are significant. Pre-service teachers who have become familiar with the meaning and characteristics of the scientific method should

TABLE XVII

ANALYSIS OF TEXTBOOKS IN PSYCHOLOGY MOST FREQUENTLY USED IN 1927

	A	B	C	D	E	F	G	H	I	J
Attention	0.5	4.8	0.6	4.0	4.3	0.4	3.9	0.8	4.0	0.2
Consciousness	0.5	....	1.5	....	....	6.9	....	....	0.4	....
Efficiency, Factors Affecting	4.2	....	5.2	....	....	....	....	5.2	....	....
Feelings and Emotions	5.8	6.0	5.3	5.0	4.2	4.3	4.5	....	2.2	4.4
Heredity	....	....	0.4	12.8	5.6	....	2.3	3.1	....	4.1
Imagination	....	7.5	0.7	3.0	5.6	1.1	2.9	....	1.7	6.6
Individual Differences	10.4	....	6.8	2.6	2.5	....	3.9	7.4	3.7	10.9
Intelligence (and its measurement)	7.0	4.3	5.3	6.1	5.6	2.2	6.0	3.5	5.6	6.4
Learning (including Habits)	19.0	11.6	19.2	6.1	5.0	4.9	16.3	4.4	12.5	12.0
Memory	....	9.7	1.2	1.1	4.9	5.4	4.5	....	5.7	8.6
Mental Hygiene	....	....	0.9	2.6	1.6	....	6.3	....	....	....
Nervous System										
Central	8.5	6.4	6.1	1.9	0.6	17.2	5.5	....	7.9	....
Automatic	1.1	....	2.4	....	....	....	3.4	....	....	....
Perception	6.0	7.8	6.1	1.9	3.5	9.4	2.6	2.2	6.6	2.9
Personality	0.2	3.0	1.9	....	....	6.0	....	....	....	....
Psychology										
Subject Matter of	3.2	1.9	1.9	1.0	....	3.3	1.7	1.0	4.2	....
Methods of	3.0	1.4	4.2	2.8	1.9	1.4	0.8	....	1.0	....
School Subjects	....	....	....	....	....	....	....	38.0	13.3	0.9
Sensations	0.6	8.5	5.9	1.9	0.3	3.1	2.6	....	4.5	....
Sense Organs	2.2	1.5	2.7	....	1.1	6.4	....	2.4	2.4	....
Statistical Methods	....	....	0.4	....	3.8	....	6.8	5.5	....	....
Thinking	7.9	3.4	6.4	....	....	6.5	3.9	....	9.8	8.3
Traits, Native	9.6	13.5	5.4	30.7	24.1	6.6	7.0	3.8	7.1	4.3
Transference of Training	4.8	....	3.9	....	....	....	3.6	14.8	3.1	4.5
Urges, Dominating Tendencies, etc.	5.5	3.4	6.4	....	....	6.5	3.9	....	....	6.3
Vocational Psychology	....	....	....	....	....	....	....	3.2	....	8.9
Volition	....	5.1	....	4.6	10.7	4.0	....	....	....	3.4

Numbers in columns indicate the per cent (to the nearest tenth) of the entire content of the textbook devoted to the topic.

A = *Psychology for Students of Education*, Gates (1923).
B = *Psychology*, Woodworth (1921).
C = *Elementary Psychology*, Gates (1926).
D = *Psychology for Normal Schools*, Averill (1921).
E = *Psychology of Childhood*, Norsworthy and Whitley (1918).
F = *Elements of Human Psychology*, Warren (1922).
G = *Psychology for Teachers*, Benson, Lough, Skinner and West (1926).
H = *Educational Psychology*, Starch (1922).
I = *Psychology and the School*, Cameron (1921).
J = *Everyday Psychology for Teachers*, Bolton (1923).

be better prepared for the duties of their positions than are those who have no insight into modern methods of experimentation, measurement, and the evaluation of data. The neurological processes involved in responding to the environment receive attention in six of the texts most frequently used. Instinctive activity is presented in eight of the texts, though not to the same extent in all of these. Learning in one or another of its many phases receives attention in each, though not to the same extent in any two books.

The more recently prepared of these textbooks give evidence of the interest in the study of personality, behavior, maladjustment, emotional instability, and allied topics.

It would seem that with these and similar textbooks as ready references, a teacher who had pursued graduate work in the field of psychology should be able to make of the subject a valuable tool in the work of the classroom teacher. The writer, however, fully agrees with the plain implication of Professor Spaulding[1] in his question, "Since all intelligent men and women know that nothing is effectively, comprehensively, and usably learned except by doing, why not teach our reading" (or our psychology) . . . "in terms of exactly what, why, how, when, and where this subject is done in real life?" (or in actual classroom experience). It appears that the work as now offered aims to perform the two great functions which, according to Professor Pyle,[2] it should perform."

> Those functions concern the psychology of the child and the psychology of the subjects taught. The first great problem in the psychology of the child is to determine *how children learn*. . . . The chief contribution of psychology in the matter of the public school curriculum concerns the methods of teaching the various school branches.

If the teacher of psychology is to present the content in the manner which psychology itself indicates is most effective for its comprehension and usability, and in such a way that the two functions named by Professor Pyle can be performed, it appears evident that the subject must necessarily cease to be an academic one, with courses definitely organized, and that it must become very elastic and adjustable in the hands of the instructor, who

[1] Spaulding, Lewis W., "What is the Matter with Teaching?" *School and Society*, Vol. XXIII, No. 595, pp. 654-5.

[2] Pyle, W. H., "Psychology and the Public Schools," *School and Society*. Vol. XXI, No. 548, pp. 767-70.

should have a "teaching-situation-laboratory" in which to present his subject.

The inquiry called for an expression of opinion as to the teaching of psychology. Criticisms and suggestions were sent by the 101 teachers who contributed the data for Table XVIII, which is a classification of the suggestions sent by these teachers. The criticisms reveal the dissatisfaction felt by those who are trying to make their work a service to both teachers and pupils.

TABLE XVIII

CRITICISMS AND SUGGESTIONS RELATIVE TO THE TEACHING OF PSYCHOLOGY IN TEACHERS' PROFESSIONAL SCHOOLS AS EXPRESSED BY 101 TEACHERS OF THE SUBJECT IN 1927

	No. Reporting	Per Cent of Total
Desirable changes to be made in administration and organization	97	32
Improvements in methods of teaching the content	70	23
Changes in nature of the content of courses	49	16
Facilities for laboratory and experimental work	24	8
Students taking the courses	21	7
Utilization of the training school	19	6
Textbooks available	13	4
Teachers now giving the courses	10	3
Total	303	99

Many of their suggestions concern methods of teaching, content of courses, and teachers of the subject; but the greater number are interpretable as based upon administration. It is to be kept in mind that these are the opinions of a group which contains those who are, perhaps, the most deeply interested teachers of psychology in the professional schools for teachers of elementary schools; and, while these are merely opinions, they are given seriously. It should be remembered, too, that only 28 teachers, or 22 per cent, of the 129 teachers who returned the inquiry sheets failed to offer any criticism or suggestion as to the present-day teaching of their subject. In one instance, one member of that group of 22 per cent of the total number of teachers who co-operated in this portion of the study stated that he felt that he had too little experience in teaching the subject to offer a safe

judgment. Teachers in the larger schools gave freely of their opinions. One who has been known and honored throughout the United States for years contributed most generously of his seasoned judgment.

Taking these criticisms as a guide, in spite of the diversity and occasional contradictions shown, one could construct curricula for the various groups of students in teacher-training institutions. Present indications are that desirable prerequisites are not required. This may be one of the results of operating professional schools for teachers on the principle that, since these professional schools are under state control and maintenance, as are the public high schools, they must admit students from the preparatory schools operated by the same authority. There is in this study some evidence that this policy might wisely be modified, with an ultimate gain ensuing to the public schools.

Another suggestion emanating from a consideration of these data is that courses in psychology, at least applied courses, should not be taught earlier than the second year of a two-year course, and that they should be given even later in the longer courses. Students fresh from public high schools have not yet attained the professional point of view and attitude. Accustomed as the majority of them have been to absorbing knowledge, few are prepared to evaluate the content of psychology from the point of view of the scientific worker in that field. After one year in the atmosphere of the professional school and frequent experience with educational measurements, together with training in the observation of children in the demonstration school, these pre-service teachers are better fitted to comprehend something of the nature and value of psychology.

Another obvious limitation in present practice is inadequate contact with the training school on the part of pre-service teachers during the time they are taking their courses in psychology. This limitation is disastrous in its effect upon both the teachers of the courses in psychology and the students in their classes. Criticisms of present and past teaching of the subject, as "too formal," "academic" in content and form of presentation, "theoretical," "unrelated to teaching situations," result as consequences of this form of organization of the professional school.

Emphasis upon the learning processes is evident in present-day practice. No other topic had so frequent mention. In several in-

stances it was pointed out that the immediate service of the study to the students themselves was prominent in the teacher's aim as well as its later service to the children the students will some day teach.

Little or no experimental or laboratory work is being done in the schools studied. This is apparently due to (1) heavy student-hour loads, (2) insufficient time, (3) inadequate facilities, (4) form of organization of the schools, (5) lack of preparation for this kind of work on the part of the students, (6) attitude of other members of the teaching staff of the school, (7) failure to use the training school as a laboratory, and (8) no clearly defined objectives.

One strong, though not frequently mentioned, criticism concerns those who have charge of the practice teaching. It is claimed that critic teachers and supervisors of teaching are lacking either in the knowledge of psychological principles or, possessing the knowledge, in the ability or the desire to apply that knowledge to the teaching of children. The method which will produce results which are obvious and presumably desirable, and which will produce these results in the least possible time are the ones insisted upon by those who have in hand the actual training of the teachers-that-are-to-be.

These data, taken as one body, give evidence that teachers of the subject are, for the most part, desirous of improving their methods of procedure, that they have high standards for measuring the qualifications of those who wish to teach in this field, that they recognize the necessity of the use of actual schoolroom situations, that they are desirous of teaching the most valuable portions of the content, and that they are willing to coöperate in attempts to study the case of psychology.

Bringing together the several parts of the picture to make a composite teacher of 1927, it appears that this teacher was a man who studied in more than one institution of higher learning, at least one of which was in the eastern part of the United States. He had the degree of Master of Arts, with one half a year of graduate work beyond the requirements for that degree, which was granted him in 1922. He had taught psychology 7.35 years. He did not have sole charge of the teaching of psychology in his school, and he taught courses other than in psychology, usually courses in the department of education. His psychology classes

met in sections of 44 pupils each, for 50-minute periods, 3 times a week. His school required about 90 clock-hours of psychology before granting its diploma. This requirement was 7 per cent of the entire curriculum. The course which he taught was largely educational psychology, and it was required of all students who wanted the school diploma. The teacher used a basal text published since 1921, and recommended that his pupils consult 10 reference books. The school library contained about 200 reference books on his subject. There was no laboratory provided for his special use, but he carried on original work, chiefly along familiar lines, such as experiments in learning. His greatest difficulty was that he must attempt to cover a vast amount of valuable material within an allotted time unquestionably insufficient for doing good work. The picture does not show this teacher demonstrating the application of psychological principles in practice schools, although these are ideal laboratories, the use of which would entail slight additional expense, if used by teachers and students of psychology. The aims of this teacher were to help the student to adjust herself to her life as an individual, and also to short-cut her preparation to become an efficient teacher of children.

This typical teacher had a voice in determining the content of the courses which he taught to the 90 per cent or more of his students who were interested in his courses. The very few who showed indifference or were incapable of understanding the subject constituted by no means an alarming group, either in size or in the attitude shown toward the work presented.

CHAPTER IV

CLASSROOM DIFFICULTIES

The actual classroom situation is the final proving ground of a teacher's skill. Likewise, it is the source to which the student of educational psychology must finally resort when testing theories and methods. Furthermore, it is invaluable as a plant for the production of difficulties. With these views uppermost in mind, the writer arranged with the Department of Classroom Teachers of the National Education Association to secure directly from the classrooms of the elementary schools throughout the country diary records of difficulties met during a period of two weeks late in the fall term of 1926. A preliminary report of the study was prepared by the writer and published by Mrs. Edith B. Joynes,[1] Chairman of the Committee on a Study of Classroom Difficulties, Department of Classroom Teachers.

A copy of the form sent to the classroom teachers is to be found in the Appendix of this study.

Four hundred copies of the forms were sent to the presidents of 50 organizations of teachers, with a request that they distribute these forms to teachers of elementary grades. One hundred ten more copies were sent directly to other classroom teachers, with the request that they coöperate. Responses were received from more than 118 teachers. Seven of these responses were composites made by groups of teachers who reported either as a school or by having one teacher report one type of difficulty, another teacher report a second type of difficulty, and so on. Though these composites were not so valuable as the reports made by individuals contributing facts under the various headings as requested, all of the reports were included in the final study of the returns.

Forms were sent to 37 states and the District of Columbia.

[1] "Report of the Committee on a Study of Classroom Difficulties," *Second Yearbook*, Department of Classroom Teachers of the National Education Association of the United States, Washington, D. C., 1927, pp. 241-246.

TABLE XIX

DIFFICULTIES REPORTED BY CLASSROOM TEACHERS

CLASSIFICATION	TEACHERS REPORTING		NO. OF PUPILS	DIFFICULTIES AS LISTED BY TEACHERS				TOTAL
	Singly	Group		Inst.	Disc.	Ethic.	Misc.	
Kindergarten	2		92	21	10	5	18	54
Kindergarten—Primary		✓		1	10			11
Opportunity—Primary	1		32	3	14	12	5	34
Grade I	11		410	42	35	35	30	142
Grades I and II	4		236	16	12	10	4	42
Grade II	10		400	53	33	32	16	134
Grades II and III	1		87	0	7	1	4	12
Grade III	7	8	962	182	40	23	25	270
Grades III and IV	5	2	411	25	18	16	7	66
Grades I, II, III, and IV	1		26	1	3	1	2	7
Grade IV	16		1,043	119	67	51	40	277
Grades IV and V	2		75	12	3	3	2	20
Grade V	10		406	90	44	40	27	201
Grades V and VI	5		566	26	21	17	14	78
Grade VI	14		749	62	37	23	16	138
Grades VI and VII	1		230	4	3	0	2	9
Grades V, VI, and VII	2		479	5	5	9	7	26
Grade VII	5		230	36	11	3	8	58
Grades VII and VIII	4		840	14	8	4	4	30
Grades VI, VII, and VIII	2		310	6	7	5	5	23
Grade VIII	4		380	20	4	5	18	47
Grades VII, VIII, and IX	1		187	3	1	2	0	6
Junior High School		✓		11	5	3	0	19
Unclassified	1		130	2	0	1	1	4
Total	108	10	8,281	754	398	299	255	1,708

Note: Certain groups sent reports without indicating the exact number coöperating. These are included and the groups designated by check marks (✓).

Returns were received from 27 states and the District of Columbia. All the elementary grades from kindergarten to the eighth grade were represented. The greatest number of teachers of any one grade was 16 of the fourth grade. Fourteen teachers of the sixth grade reported. The smallest number of pupils represented in the tabulation by grades was 26, and they were taught by a teacher who reported that her task was to instruct Grades I, II, III, and IV. The greatest number of pupils of any one grade was 1,043, who were in the fourth grade. Consequent upon this

greater number of pupils, the greatest number of difficulties was reported in the fourth grade. The total reported by teachers of the third grade was only 7 less, however.

To give the teachers some indication of the kind of response which was desired, without suggesting difficulties too forcefully and thus defeating the purpose of the study, and also to aid in classifying and arranging the returns, instructions were given them by the writer to list the difficulties as (1) instructional, (2) disciplinary, (3) moral-social (ethical), or (4) miscellaneous. Table XIX gives a summary of the returns from these more than 118 coöperating teachers, who were teaching 8,281 and more pupils. The total number of difficulties reported under the classifications suggested were as follows:

Instructional	754, or 44% of the total.
Disciplinary	398, or 23% of the total.
Moral-Social	299, or 18% of the total.
Miscellaneous	255, or 15% of the total.

A close study of the reports revealed that a subdivision of many of the statements, and a re-classification of the items should be made. This was done in order that a consistent policy might be followed in studying the implications of these reported difficulties. Some of the teachers reported their difficulties as follows: "To make children feel responsibility for needs of others, being on time, telling the truth, applying themselves to their work without being told." Obviously this statement requires breaking up into the elements of which it is composed. Other statements covered work in two subjects as, "To enunciate clearly in music, reading, and in all recitation work."

After breaking the difficulties into their elements these were re-classified as summarized in Table XX, which shows that there was a total of 1,873 difficulties, of which 914, or 49 per cent, were instructional; 437, or 23 per cent, disciplinary; 455, or 24 per cent, moral-social; and 67, or 4 per cent, in the miscellaneous group.

In the instructional type of difficulty a further analysis showed that many of these difficulties were general in character as, "To teach effectively with 49 little children in charge for three hours, with only one fifteen-minute intermission." These were further subdivided under their several classifications, as shown in Ap-

TABLE XX

Re-classified Difficulties Reported by Classroom Teachers

	Total No. Difficulty		Per Cent of Group	Total
I. Instructional		914		49
General	360		39.0	
Arithmetic	266		29.0	
Reading	92		10.0	
English	101		11.0	
Geography	32		4.0	
Handwork	16		2.0	
Spelling	14		0.5	
Handwriting	12		1.3	
Music	8		.8	
History	7		.7	
Drawing	6		.6	
II. Disciplinary		437		23
III. Moral-Social		455		24
IV. Miscellaneous		67		4
Total	914	1,873	100.0	100

pendix E, pages 102-13. Frequency of mention of each difficulty is shown by numerals at the right of the statements.

By an empirical judgment the writer then attempted to determine the implications in these difficulties. A close inspection of the statements seemed to lead to the conclusion that many of these reported difficulties would never have been reported as such had the room teacher seen the psychological principles involved. Rather, it would seem that these situations, had they arisen, would have been considered as opportunities for the exercise of those skills which all teachers should acquire during the period of their pre-service training. The author, therefore, re-classified these difficulties under the four heads, psychological, technique, administrative, and home. If, in the judgment of the writer, the difficulty was one due to failure to apply good technique, or one in which the exercise of good technique was indicated as needed, the letter *T* was placed before the statement; *P* was the symbol used where the psychological implication was judged to be evident; *H*, if home coöperation was necessary, or where the home situation was unfavorable to the child's development; and *A*,

if the difficulty implied faulty or incomplete administrative procedures.

These symbols *T*, *P*, *H*, and *A*, were placed before each statement of a difficulty as the judgment of the writer dictated. These symbols, therefore, occurring in the tabulation in the Appendix, pages 87-121, represent the judgment of the writer on the implications of this portion of the study. A summary of these empirical judgments is given as Table XXI, which shows that, taking the problems as listed but once, 86.5 per cent of them imply that techniques to meet these situations should be acquired in the period of professional preparation under the skillful instruction of critic teachers and supervisors. Eighty-seven per cent of them indicate that educational psychology has a contribution to make toward a solution of these problems. Twenty-two per cent of the total number were judged to be due to inadequate

TABLE XXI

IMPLICATIONS OF DIFFICULTIES AS DETERMINED BY EMPIRICAL JUDGMENT

TYPE OF PROBLEM	INDICATIONS				TOTAL—EACH DIFFICULTY BUT ONE FREQUENCY
	T Technique	P Psychology	A Administration	H Home	
Instructional	(336)	(328)	(64)	(31)	(361)
General	97	88	39	14	113
Arithmetic	92	96	4	0	96
English	37	37	4	2	37
Reading	40	40	4	13	40
Geography	20	17	5	0	25
Handwork	15	15	0	2	15
Spelling	8	8	1	0	8
Handwriting	6	6	2	0	6
Music	8	8	1	0	8
History	7	7	3	0	7
Drawing	6	6	1	0	6
Disciplinary	108	112	36	41	121
Moral-Social	74	78	4	36	80
Miscellaneous	5	9	29	12	42
Total	523	527	133	120	604
Per Cent of Grand Total	86.5	87	22	20	100

administration; and 20 per cent of them, chiefly of the disciplinary and ethical types, indicated the need of better home conditions for the children involved.

The writer saw that, in a very few of these difficulties, such as "Doing of clerical work during the session," the administration was largely at fault. A difficulty such as "Normal child who does not get enough sleep," indicates the necessity for better home management. The teacher reporting the difficulty she met in teaching children, "to tell the truth at all times" seemed to imply the need of assistance from the study of educational psychology. In these and similar instances, but one letter *A*, *H*, or *P* was placed before the statement. Usually, however, the problem was deemed a matter of both good technique and educational psychology, and these implications were so indicated.

Considering the data obtained directly from the classrooms of over 118 teachers, in December, 1926, the writer concluded that these and probably all other classroom teachers in the elementary schools of this country need the services of psychology in meeting 87 per cent of the situations that arise in the discharge of their duties. Of these situations 62 per cent are in the line of instructional activities, connected with subject-matter, 21 per cent are disciplinary, 15 per cent are moral-social, and 2 per cent are miscellaneous situations.

This conclusion agrees with the statement made by William Tait[1] who said: "Discipline is a perennial problem with the teacher. Here, it seems, psychology ought to furnish some aid. . . . First, if the capacity of the child is known . . . then the teacher is in a position to say what he can do and what he cannot do."

The statement quoted from Professor W. H. Pyle[2] is also in full accord with the findings of this study.

A study of these data might serve the purpose of indicating to teachers of psychology some of the many difficulties which in-service teachers have to meet, and for which the study of psychology should aid in preparing them.

An interesting study made by Dr. Goodwin Watson[3] led him

[1] Tait, William D., "Psychology, Education, and Sociology," *School and Society*, Vol. XXI, No. 524, p. 33.

[2] Pyle, William H., *op. cit.*

[3] Watson, Goodwin B., "What Shall Be Taught in Educational Psychology?" *Journal of Educational Psychology*, Vol. XVII, No. 9, pp. 577-99, December, 1926.

to conclude that "the apparent concurrence of opinion would place major emphasis upon problems of emotion and personality adjustment, problems of original nature and heredity, and problems of general teaching method. Little emphasis would be placed upon the psychology of the acquisition of skill, or the psychological problems involved in home-making and pre-school child-training, or the various schools and theories in psychology"; and, "The best present procedure in the teaching of educational psychology is to follow the order of value set by agreement among educators, meanwhile investigating further the relative difficulty of learning to handle each type of problem, the amount of transfer from each topic into educational situations, and the form of organization and systematization which will most effectively extend this transfer."

Since Dr. Watson used the facilities of Teachers College, Columbia University, for his investigation, the writer assumes that his recommendations were meant to apply to the upper levels of students; but his findings concerning some points reported in his article were markedly similar to those appearing in the course of another study made by the writer.

In an attempt to obtain elements to use in devising a test which might be used with resident students at Teachers College, to measure their knowledge of teacher-pupil relations, the writer selected thirty statements from *The Principles of Teaching* written by E. L. Thorndike (published by A. G. Seiler in 1916). These statements were arranged in the form of a True-False test. The test was submitted to a group of thirteen graduate students and members of the staff at Teachers College in the year 1925-1926. These thirteen people were in the seminar in educational psychology when they were asked to evaluate the statements as elements in a test to determine a knowledge of teacher-pupil relationships. The same procedure was followed in the seminar in the professional preparation of teachers, ten persons being in the group, which again was composed of members of the staff and graduate students in that field. The responses made by these two groups were studied to determine the degree of agreement between them. The groups were too small to give much significance to the result, though the coefficient of correlation of .64 (by the rank-difference method) seemed to point to considerable agreement between them. (Table XXII)

Later this test, identical in form and substance, was given to a class of twelve students in educational psychology being taught by the writer. Ten of these were superior teachers in the public schools of Cleveland, Ohio. They had not been coached for any

TABLE XXII

EVALUATION OF TEST ELEMENTS BY THREE DIFFERENT GROUPS

No.	13 IN GROUP 1		10 IN GROUP 2		1 AND 2 COMBINED 23 IN GROUP		12 IN GROUP 3	
	Voted Value	Per Cent	Voted Value	Per Cent	Voted Value	Per Cent	Answer Correct	Per Cent
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1	0	0	0	0	0	0	9	75
2	11	85	6	60	17	74	10	83
3	10	77	9	90	19	83	12	100
4	8	62	5	50	13	57	10	83
5	12	92	7	70	19	83	10	83
6	2	15	1	10	3	13	9	75
7	8	62	9	90	17	74	11	92
8	9	69	5	50	14	61	11	92
9	10	77	6	60	16	70	11	92
10	11	85	7	70	18	78	0	0
11	13	100	10	100	23	100	12	100
12	13	100	9	90	22	96	12	100
13	11	85	9	90	20	87	4	33
14	6	46	9	90	15	65	10	83
15	9	69	7	70	16	70	11	92
16	11	85	7	70	18	78	11	92
17	6	46	8	80	14	61	8	67
18	6	46	8	80	14	61	8	67
19	6	46	6	60	12	52	10	83
20	10	77	7	70	17	74	10	83
21	6	46	6	60	12	52	11	92
22	9	69	7	70	16	70	11	92
23	5	38	6	60	11	48	7	58
24	4	31	7	70	11	48	9	75
25	10	77	7	70	17	74	12	100
26	4	31	5	50	9	39	10	83
27	9	69	9	90	18	78	10	83
28	13	100	7	70	20	87	12	100
29	8	62	9	90	17	74	12	100
30	9	69	8	80	17	74	11	92

30 Test Elements evaluated by Group 1 (13 in group) and by Group 2 (10 in group). Voted Values columns indicate numbers agreeing as to value of the element. Correlation between these sets of judgments: $r = .64$.

Test given student group of 12 resulted in columns 8 and 9. Correlated with final grades for the course: $r = .85$.

test and had not been told that a test was to be given on the day it was administered. The results are shown in Table XXII in columns 8 and 9. Column 8 shows how many of the group marked correctly each element numbered in column 1. Column 9 shows the per cent of the class marking correctly the element numbered in the first column of the table.

The scores on the test were correlated with final scores for the course (using the rank-difference method) and an r of .85 was found. While mindful of the cautions which must ever be kept in mind when considering findings in small groups, the investigator feels that experiments of this nature, particularly if used with larger groups, might aid in eventually securing tests which could be used in measuring certain aspects of the as yet unknown results from the study of psychology. Dr. Watson's study, conducted under far more favorable circumstances, seems to confirm this belief.

CHAPTER V

SUMMARY AND IMPLICATIONS OF THE STUDY WITH RECOMMENDATIONS

The analysis made to discover what, if any, are the changing trends in the teaching of psychology in professional schools for the preparation of teachers for elementary schools reveals certain significant tendencies. While considering these trends it must be kept in mind that not all the professional schools for teachers are included in this study. Had complete data been available, it is quite possible that the picture might be different. Since, however, data were collected from 80 per cent of the states, from the newer as well as the oldest schools for the preparation of teachers, and from two sources in many of the schools, a few prominent features seem to be worthy of consideration.

During the progress of the study of the data presented, certain related aspects very frequently forced themselves into prominence. All of these invite research. One subject from research may be put in the form of the pressing question: What effect upon prospective teachers does the study of psychology have? Nowhere in this study does the evidence point to any answer other than that offered by the instructors in that subject, who state that students taking psychology in our teacher-preparatory schools fail to sense its values because it is offered as theory about children, and in disjointed and dissected fragments. This answer may serve to call attention to recent experiments with another procedure whereby a child, or a group of children, is studied as a complex unit. The method requires special skill, but its use by psychologists will prevent the imputation that psychology is a body of formulated generalizations about rats, chicks, and human beings.

A second inviting field for research is indicated by the nature of the problems arising within the experience of the teacher in the classrooms of our elementary schools. Some of our leading

educators have voiced the opinion that problems in teaching are, as they always have been, of two kinds; the first, including such problems as aiding children to acquire knowledge, to form desirable habits and attitudes, and to develop valuable skills, constitute by far the larger group; but those involving the discipline which leads to intelligent and healthy self-control are the most intricate problems of the classroom. These problems require the services of psychology to a greater extent than ever before. The technique of teaching cannot be conceived apart from the psychology both of the subject and of the pupil.

Since, however, the entire scope of the larger problem of the effective preparation of teachers for elementary schools was not sought in the present study, those facts which stand out were evaluated only for their bearing upon the problem chosen for the purposes of this study.

The survey of present practices, supplemented by the analysis of previous procedures in these same or similar schools, disclosed the facts presented in the preceding pages. From these it appears safe to imply that:

1. Much account is being taken of the phenomena of differences, both within individuals and within groups, not only among children in the classrooms of elementary schools but also among prospective teachers enrolled in teacher-preparatory institutions.

2. A greater number of curricula are being offered in professional schools for the preparation of elementary school teachers than formerly.

3. The curricula of the schools studied are more highly specialized than formerly and, at the same time, offer more electives to those enrolled therein.

4. There is a decrease in the amount of pure psychology and an increase in the amount of applied psychology being offered in these schools.

5. Instructors in psychology in the teacher-training institutions represented in this study ranked high in academic preparation for their positions.

6. There is too great a disparity of aims in the teaching of psychology in professional schools for prospective teachers.

7. Too much has been expected heretofore from the mere study of psychology in an academic setting.

8. Efforts are being made to make prospective teachers familiar with the meaning and characteristics of the scientific method.

9. Two courses in educational psychology are required before graduation from the professional schools for teachers which were studied.

10. Attempts are being made to teach the significance of objective measurements.

11. Interest is shown by the schools selected for inquiry in the study of personality, maladjustment, emotional instability, and allied topics.

12. Instructors in psychology in the schools represented are of the opinion that desirable changes should be made in the administration and organization of the work of their schools.

13. Improvement in the methods of teaching psychology is deemed important by teachers of psychology.

14. Inadequate contact with the practice school is obviously a factor in producing the results apparent in the product of professional schools for teachers.

15. Emphasis upon the learning processes is evident in present practice.

16. Little or no experimental or laboratory work is being done in the schools studied.

17. Teachers of psychology in the schools studied are, for the most part, desirous of improving their methods of procedure.

18. Teachers of psychology and measurement carry service loads heavier than other teachers carry in these schools not excepting any.

19. Teaching methods used by instructors in psychology are lectures, classroom discussions, reports, laboratory experiments, demonstrations (some with children), and the use of textbooks. The last-named is the prevailing practice.

20. There is evidence that in some states changes are taking place which aim to provide for teaching the psychology of a special subject in connection with the work in that subject.

21. Classes in psychology meet 3 times a week, for periods of 50 minutes each.

22. The requirement in psychology in the schools included in this study is 7 per cent of the curriculum chosen. The diploma is not awarded until this requirement has been met by the student.

23. Since the time allotted to the work in psychology is in-

adequate for extensive choice, there is an obvious necessity for a most careful selection of the content to be presented to prospective teachers.

24. Instructors in psychology are expected to determine either without restrictions or within generous limits the content of the courses given.

25. Procedures for selecting more valuable portions of psychology appear as promising experimental studies.

From the analysis of classroom difficulties stated by the teachers themselves, the following inferences were drawn:

1. Approximately 90 per cent of all the problems arising in elementary schools have their foundations upon some psychological principle.

2. Prospective teachers need to acquire the knowledge and skills necessary to analyze classroom situations which develop under actual teaching circumstances.

3. In-service teachers have constant opportunities to exercise skill in discerning the psychological implications of the many aspects of their work.

4. Instructors in psychology in teacher-training institutions have a great and essential service to render in the preparation of teachers for elementary schools.

Recommendations

During the course of this investigation and the study of the data obtainable, certain phases of the situations revealed came to acquire more prominence than others. It would appear, therefore, that these should be pointed out for special consideration. Among them are:

1. A controlled experiment, or a series of such experiments, scientifically set up, the results objectively measured, the procedures fully described, should be conducted in order to get the data necessary to assign to psychology its rightful place in professional schools for the preparation of teachers.

2. All pre-service teachers should observe children under the instruction of skillful teachers in a demonstration school for a definite portion of each week during their entire first year. They must grow into the professional attitude which comes from steady exposure to its atmosphere.

3. Without too great delay, coöperative research to discover those essentials in psychology which are of greatest service to teachers in elementary schools should be carried through to aid administrators and subject matter teachers to bring about needed reforms in teacher-preparatory institutions.

4. Coöperation among all instructors in psychology in the professional schools for the preparation of teachers should be secured. Objectives should be determined by means of professional exchange of experiences until such time as scientific experiments produce facts reliable enough to give guidance.

5. The teaching of psychology should be assigned only to those who have met the requirements set by the American Association of Teachers Colleges quoted in the McMullen study:[1]

> The minimum scholastic requirement for members of the faculty who give instruction in the college department shall be graduation from a college of recognized standing, and additional training which shall include at least one year of study in their respective fields of teaching in a recognized graduate school, or equivalent, and presumably possession of the master's degree.

This requirement should prevent, to some extent at least, the diversion of state maintenance into unprofitable channels.

6. A prerequisite course in biology is desirable for students of psychology. Preferably this should be a laboratory course under a specialist in that field.

7. Courses in applied psychology should not be taken by the pre-service teacher during the first semester. Applied psychology requires an attitude of mind which is engendered only by previous contacts with children in many teaching situations.

8. As soon as subject-matter teachers of special subjects can acquire a knowledge of the psychology of their subjects, they should incorporate this knowledge into the teaching of their courses. There is no need of divorcing the psychology of reading from the pedagogy of that subject. A better insight into the teaching methods advocated should be one of the expected outcomes from such a procedure.

9. Classes in psychology, if large, should be divided into sections of a size possible of accommodation in the demonstration school, in order that group discussions may arise out of an experience common to all of its members.

10. Since it is obviously impossible to make a competent special-

[1] McMullen, L. B., *op. cit.*, p. 94.

ist in psychology in the few years of the course provided in professional schools for the preparation of teachers for elementary schools, it is manifestly unwise to attempt to do so. Sound scholarship in the required branches, together with a clear understanding of the essentials of the psychology of the learning involved, should be the goal of these schools.

11. Since many students of psychology who have been rated as excellent students, scholastically considered, have not shown themselves to be good teachers of children, it follows that those whose opportunity it becomes to teach psychology in professional schools for the preparation of teachers should consider their courses as "service courses" and, therefore, they should aim to demonstrate and to interpret the content as it bears upon teaching situations, rather than so to teach it that their students may comprehend it as a distinct branch of academic subject matter.

APPENDIX

A

INQUIRY SENT TO TEACHERS OF PSYCHOLOGY IN PROFESSIONAL SCHOOLS FOR THE PREPARATION OF TEACHERS, 1927

To the Instructor in Psychology:

If there is only one teacher giving instruction in the subject, will that one please fill in the information asked for on the inquiry and return at once in the enclosed self-addressed envelope? If more than one gives instruction, will each one supply such data as will give needed facts for the comparison with the study made by Professor Guy Whipple some years ago?

Please return before June 7, 1927. Thank you.

1. Name in full .....
2. Name and address of institution.....
3. Name of institution where you studied psychology .....
4. Degree or degrees attained, where, and when? .....
5. Number of years of teaching of psychology .....
6. Do you have sole charge of teaching psychology in your school? .....
7. Do you give instruction in other courses? .....
8. If you give other courses, list them here .....
9. How many pupils are enrolled in each of your classes in this subject this year? .....
10. How often does your class meet? .....
11. What is the length of your class period in clock-hours? .....
12. How many clock-hours are actually given to classroom work in psychology during the course required for the diploma of your school? .....
13. What per cent of the entire curriculum is devoted to psychology? .....
14. Is your course general psychology? ..... Educational psychology? ..... Or a combination of the two? .....
15. What is the average age of the pupils taking psychology this year? .....
16. Is the course required of all students? .....
17. Do you use a basal text? ..... If so, give name and date of publication .....
18. Name the reference books you recommend to your pupils ....

19. About how many reference books in your subject does your school library contain? .....
20. What laboratory facilities are at your disposal? .....
.....
21. Do you carry on any original work? ..... If so, what? .....
.....
22. In your opinion, what are your greatest difficulties? .....
.....
23. What are your aims in teaching psychology? .....
.....
24. How is the content of the courses determined? .....
.....
25. What per cent of your class exhibit interest in the subject? .....
.....
26. Describe the attitude of the others in the class .....
.....
27. What criticisms can you offer as to the teaching of psychology in your school and in other teacher-training institutions? Please give full expression of your judgment in space below:

B

DIARY RECORDS OF DIFFICULTIES MET BY CLASSROOM TEACHERS, 1926-1927

The Department of Classroom Teachers
of the
National Education Association
of the United States

November 17, 1926

My dear Co-worker:

Will you be one of the many who are needed to help solve the problems that vex and burden classroom teachers in this country? A great effort is being made to secure directly from those who are engaged in elementary educational work information that may be used in helping to solve these problems scientifically and effectively. Each one who coöperates will be notified when the final report has been compiled. Miss Clara Robinson of Cleveland, Ohio, has kindly offered to prepare the report for the Department of Classroom Teachers. You are asked to proceed as follows:

1. From day to day for a period of two weeks make a memorandum of the difficulties you meet in your work, such as the following:

   a. Instructional, as teaching children to divide by divisors like 17, 39, or 28.

   b. Disciplinary, as helping children to refrain from wriggling in their seats when such movements interfere with the work of other children.

   c. Ethical or moral-social (as inculcating ethical principles), such as telling the truth.

   d. Miscellaneous.

2. Include all difficulties. Make your notes definite and specific. Jot down enough of detail to enable you to recall the experiences later.

3. After your memoranda are comprehensive enough to cover the full range of your difficulties, use the enclosed form in the preparation of your report. Please return it in the enclosed envelope not later than December 18.

Your coöperation will be greatly appreciated.

Very sincerely yours,

(Signed) Edith B. Joynes

THE DEPARTMENT OF CLASSROOM TEACHERS
NATIONAL EDUCATION ASSOCIATION
WASHINGTON, D. C.

REPORT ON CLASSROOM DIFFICULTIES FOR A PERIOD OF TWO WEEKS

Note: In making the report, write on one side of the sheet only. Use as many sheets as you require to give your full report. Do not omit any of your difficulties. Include every one. If you cannot classify them, send them unclassified. The main point is to LIST THEM ALL.

1. Name in full .....
   Street number .....
   City ..... State .....
2. Name of your school .....
3. Your grade or grades, or whatever type of work you do.....
4. Number of children under your care.....
5. Date of your report as written.....

Please Return by December 18

INSTRUCTIONAL DIFFICULTIES, as teaching children to divide by divisors like 17, 39 or 28. (Number each difficulty and make comments.)

DISCIPLINARY DIFFICULTIES, as helping children to refrain from wriggling in their seats when such movements interfere with the work of other children. (Number each difficulty and make comments.)

ETHICAL OR MORAL-SOCIAL DIFFICULTIES, as inculcating ethical principles, such as telling the truth. (Number each difficulty and make comments.)

MISCELLANEOUS DIFFICULTIES. (Number each difficulty and make comments.)

C

ORIGINAL WORK BEING DONE BY 85 INSTRUCTORS IN PSYCHOLOGY IN 58 PROFESSIONAL SCHOOLS FOR TEACHERS IN 1927

Learning	7
Methods of learning	3
Effects of distributed and massed learning on transfer, retention, and retroaction	1
Improvement of study	1
Measurement	4
Individual differences	4
Personality tests	2
Tests of intelligence, character, and temperament on college level	1
Testing musical talent	1
Latin prognosis tests	1
Relationship between scores on standardized tests and school marks assigned by teachers	1
Success in college *versus* intelligence	1
Administration of achievement and mental tests to children in the teacher-training school	1
Degrees of usefulness of intelligence tests in prediction	1
Analysis of student body	1
Best size of class	1
Segregation according to ability	1
Research	4
Research on topics chosen by seniors	1
Value of extra-classroom preparation	1
Relation of outdoor exercise to efficiency	1
Puzzle-solving	1
Reaction time	1
Problem study	1
Students' needs	1
Scholarship	1
Attention	1
Memory	1
Habit	1
Project method	1
Emotions	1
Emotional reactions of adolescents at school	1
Attitudes	1
Health	1

Problems in the teacher-training school 2
Primary reading 1
Children's drawings 2
Investigation of practice 1
Problem cases of school age 1
Delinquency 1
Mental behavior of children at work 1
Some clinical work 1
Concrete school situations. (Show application of psychology.) 1
Collecting data in vocational psychology 1
Each student makes a careful study of a child and records everything systematically 1
Telepathy 1
Psycho-physics 1
Educational psychology 1
Only experiments 1
Limited experiments 1
Preparation of a textbook in psychology .....
Preparation of a textbook in the history of education 1
Preparation of a handbook for normal school students in two-year normal school 1 1
Compilation of syllabi 1

D

CRITICISMS MADE BY 101 TEACHERS OF PSYCHOLOGY IN PROFESSIONAL SCHOOLS FOR TEACHERS IN 1927

A. *Teachers of the Subject* 10

1. Some know nothing about psychology. (3)
2. They should be specialists in their field. (3)
3. Some who did not major in psychology teach it as a sideline. (2)
4. Some are overburdened with work. (1)
5. There are not enough helpers. (1)

B. *Methods of Teaching the Content* 70

1. Insufficient effort is made to show students where psychology functions in everyday life and in the schoolroom. (5)
2. As taught, the subject is dry, abstract, not practical, not productive of interest. (4)
3. There should be more experimentation or laboratory work. (4)
4. Lecture method is used too much. (2)
5. Not enough experimentation to show students how to make investigations while on their jobs. (2)
6. There is a great lack of directed observation in the training school to accompany discussion of topics in class. (2)
7. We are not thorough enough in the application of psychology to the teaching business. (2)
8. Students are not prepared for scientific work. They prefer theory. (2)
9. Mode of presentation in the past was all wrong. (1)
10. There should be pre- or pro-seminar organization of classes. (1)
11. Too little really scientific work is being done. (1)
12. Teachers must relate their work to concrete, schoolroom situations. (1)
13. Procedures are desultory rather than expert and scientific. (1)
14. There is too close adherence to textbooks. (1)
15. Too little relation between psychology and teaching. (1)
16. Emphasis should be put upon experiments to show building of percepts and laws of learning. (1)
17. Not sufficiently dynamic. (1)
18. Too much a matter of definitions and not enough thinking in concrete terms and situations. (1)
19. Psychology should be taught largely as a laboratory science with emphasis upon experiments in the learning processes and in reasoning. (1)

20. Educational psychology should be one half laboratory work. (1)
21. Teachers become obsessed with the fast-jamming process, forgetting that the value of psychology is in its application to life problems. (1)
22. The subject is taught as an end in itself. (1)
23. One reason for a bad beginning is requiring too much reading from beginners. (1)
24. Too much time is spent in explanation of psychic phenomena. We ought to attend to child behavior as we find it and as we have to deal with it. (1)
25. Teachers' colleges should develop a content and a technique of experimentation. (1)
26. There is too little application to teaching and learning. (1)
27. There should be adequate opportunity for observation of application of psychology to classroom work. (1)
28. There is a lack of means to objectify psychological concepts. (1)
29. General psychology cannot be taught without a fair amount of demonstrational apparatus and charts. (1)
30. It is crowded into too short an interval to permit of the many experiments which clinch interest and convince the student. (1)
31. Psychology is one of the most valuable as well as most needed courses. The instructor has the finest opportunity to build right attitudes toward work, study, and teaching. (1)
32. Most teachers of the subject underestimate the capacity of their students, and teach at the poorer half of the class. (1)
33. The course fails if it doesn't completely revolutionize the student's view of himself, and eradicate completely his infantile view of man. (1)
34. Not much scientific work is being done. We work with generalizations without being conscious of the way these were reached. (1)
35. There was too much laboratory work in the past. (1)
36. Too little emphasis is put upon the experimental attitude and too much upon general reading. (1)
37. In a one-semester course one can only create interest and develop a scientific and experimental attitude. (1)
38. Psychology is the most unpsychologically taught subject in the whole curriculum. (1)
39. General psychology and educational psychology should be taught with laboratory sections. (1)
40. Experimental psychology should be correlated with textbook work. (1)
41. If only one course is offered, best results are obtained by sticking closely to a good textbook. (1)
42. Normal school students need practice in identifying behavior types. (1)
43. We should try to psychologize. (1)
44. Aim should be to improve ability of graduates to do scientific and scholarly work. (1)

45. Students have had no experience in library method, and this method is not demanded in all normal school work. (1)
46. Students have insufficient practice in organizing material and notes. (1)
47. So many students develop no permanent interest and so many of them lack appreciation of the scientific method in psychology. (1)
48. There should be no laboratory work for students. (1)
49. No experiments of value for teacher-training have been developed as yet. (1)
50. "This college seeks to make educational psychology concrete, intelligible, largely experimental, highly interesting, and of direct application in future classrooms when the students are teachers." (1)
51. Courses are too formal if the textbook is followed closely. (1)
52. Fact-groups are not sufficiently related to aid students later in their teaching. (1)
53. There is an insufficient supply of reference books and psychological journals. (1)
54. Work would be strengthened by more observation of children at work and at play. (1)

C. *Nature of Content of Courses* 49

1. Courses in psychology must be organized around the content and control of children's experiences. (4)
2. There is much duplication and overlapping. (3)
3. There is too great a tendency to give pure, systematic facts. (3)
4. Unscientific, accepted traditionally. (2)
5. Too theoretical. (2)
6. Not closely enough related to training-school situations. (2)
7. Often too bookish. (2)
8. Should offer the mental hygiene of daily living. (2)
9. We need scientific determination of content of courses. (2)
10. General formulæ for procedures. (1)
11. "Methods" and formalism. (1)
12. Should put special stress upon pre-school problems. (1)
13. In past, too much stress upon abnormal psychology. (1)
14. Elementary courses attempt to be too advanced. (1)
15. Too much emphasis is put upon pure psychology and not enough on a few principles abundantly applied. (1)
16. The preceding teacher fixes the course here. (1)
17. Too much lag between modern theory and practice. (1)
18. Emphasis should be put on instincts and emotions. (1)
19. Should make more applications and stress principles of behavior more. (1)
20. In many teacher-training institutions, only a diluted mixture of general and educational psychology is offered, confusing rather than clarifying. (1)
21. In many institutions, courses are hopelessly antiquated and highly

academic, offering little of value to the teacher facing schoolroom situations. (1)

22. Child psychology is fundamental. (1)
23. Beginning-psychology has little cultural and educational value when required of immature students. (1)
24. Educational psychology seems to have some values after students have teaching experience, but that is true of almost any subject. (1)
25. "Limitations are our own. We are not satisfied with our courses and are constantly changing them." (1)
26. There should be a good, basic, rather scientific course before taking up the practical side of the work. Clearness in psychological principles is the first requisite for clearness in pedagogical thinking. (1)
27. There is danger that psychology, especially the introductory course, will be made a mongrel course in education. (1)
28. Psychology should be removed from an academic setting, and professionalized. (1)
29. Students are offered too little opportunity for child study. (1)
30. Students are weak in the psychology of the learning processes. (1)
31. There should be more definiteness regarding content, objectives, and methods, in teacher-training institutions. (1)
32. There is a tendency to overemphasize the abstract and theoretical phases with neglect of practical applications. (1)
33. The practical side is overemphasized. The course becomes a "methods" course. (1)
34. There is a very real need of coöperative effort to determine essentials. There is little agreement as to content and procedures. (1)
35. There is much uncertainty as to subject matter. (1)
36. There is too much formal work. It is not humanized enough. (1)
37. Content offered should meet the needs of students in their learning. (1)
38. There should be clearly defined objectives and a recognition of abilities, attitudes, and skills. (1)
39. Too little physiology is given. (1)

D. *Laboratory and Experimentation* 24

1. There should be more experimental or laboratory work. (4)
2. There should be better equipment for laboratory work. (3)
3. There is too little stress put on laboratory work. (1)
4. Educational psychology should be one half laboratory work. (1)
5. Psychology should be taught largely as a laboratory science with emphasis upon experiments in learning processes and reasoning. (1)
6. There should be no laboratory work for students. (1)
7. No experiments of value for teacher-training have been developed as yet. (1)
8. Teachers' colleges should develop a content and technique of experimentation. (1)

9. There should be a laboratory for experiments. (1)
10. There should be apparatus for demonstration purposes. (1)
11. General psychology cannot be taught without a fair amount of demonstrational apparatus and charts. (1)
12. We need time for experimentation. (1)
13. The work is crowded into too short an interval to permit of the many experiments which clinch interest and convince the student. (1)
14. Students are not prepared for scientific work. They prefer theory. (1)
15. There has been too much laboratory work in the past. (1)
16. Too little emphasis is put upon the experimental attitude and too much upon general reading. (1)
17. In a one-semester course, one can only create interest and develop a scientific and experimental attitude. (1)
18. General psychology and educational psychology should be taught with laboratory sections. (1)
19. Experimental psychology should be correlated with textbook work. (1)

E. *Administration and Organization* 97

1. More time should be given psychology. (16)
2. Classes are too large. (5)
3. A longer course in psychology is needed. (4)
4. Each curriculum should provide a first course in general psychology. (4)
5. Provision should be made for more experimental or laboratory work. (4)
6. Courses in psychology must be organized around the content and control of children's experiences. (4)
7. Biology should be a prerequisite to any work in psychology. (3)
8. Teachers of psychology should be specialists in their field. (3)
9. Some courses in psychology are being given by those who know nothing about the subject. (3)
10. A definite course in educational psychology should follow the course in general psychology. (2)
11. The course is offered too early. Students are not prepared for it during their first year. (2)
12. Insufficient effort is made to show students where psychology functions in everyday life and in the schoolroom. (2)
13. There is not enough experimentation to show students how to make investigations when on their jobs. (2)
14. Teachers who have not majored in psychology teach it as a sideline. (2)
15. There is no demonstration school—only a small practice school which provides poor opportunity for observation. (2)
16. First give a basic course in psychology. Students cannot apply psychological principles to education until familiar with principles through a general course in psychology. (2)

17. There should be a more uniform group of prerequisites in science, or else groups should be differentiated. We do not have complete control over this. (2)
18. There is too much duplication and overlapping. (2)
19. There is lack of directed observation in the training school to accompany discussion of topics in class. (2)
20. The attitude of some instructors in teacher-training institutions is that education is not a science. (2)
21. There should be a three-unit course in genetic psychology with special stress upon the problems of the pre-school period. (1)
22. The problem is to give even the minimum essentials in the time we have. (1)
23. The work in psychology should be correlated with that of other departments. (1)
24. There is too little relation between psychology and teaching. (1)
25. Psychology work is not closely enough related to training school situations. (1)
26. There is too much lag between modern theories and practice. (1)
27. In the curriculum as now set up the courses in psychology are placed too closely together. These courses should be offered throughout the period of professional preparation for teaching. (1)
28. The department of psychology should be distinct and separate from the department of education. (1)
29. Courses should be so organized as to avoid much repetition and overlapping. (1)
30. Courses in neurology and endocrinology should be made prerequisite to work in psychology. (1)
31. In many teachers colleges only a diluted mixture of general and educational psychology is offered, confusing rather than clarifying. (1)
32. Students here have to take psychology before taking a course in biology. (1)
33. There is not enough time for the students to prepare their work adequately. (1)
34. The most serious lack is in the teachers themselves. They are overburdened with work. (1)
35. In many institutions the courses in psychology are hopelessly antiquated and highly academic, offering little of value to the teacher facing schoolroom situations. (1)
36. All two-year teacher-training courses should be discontinued. Four-year courses should be required everywhere. (1)
37. There is not a close enough coördination with practice work. (1)
38. Students need a course in applied psychology as an accompaniment rather than as a prelude to training, with children in the classroom. (1)
39. Beginning psychology has little of cultural and educational value when required of immature students. (1)

40. Child psychology is fundamental. (1)
41. "Limitations are our own. We are not satisfied with our courses in psychology. We are constantly changing them. Conditions are ideal. We have a free hand." (1)
42. There should be clearly defined objectives and recognition of abilities, attitudes, and skills. (1)
43. Psychology should function more directly in the training school. (1)
44. There should be a good, basic, rather scientific course before taking up the practical side of the subject. Clearness in psychological principles is the first requisite for clearness in pedagogical thinking. (1)
45. There is a danger of making the courses, especially the introductory course, in psychology mongrel courses in education. Not psychology for the sake of psychology, but for coherence. (1)
46. Psychology should be removed from an academic setting and professionalized. (1)
47. Teachers' colleges should develop a content and technique of experimentation. (1)
48. There should be adequate opportunity for observation of application of psychology to classroom work. (1)
49. There is lack of means to objectify psychological concepts. (1)
50. Students are not provided with opportunities to make direct application of psychological principles. (1)
51. Training-school critic teachers need to know and apply psychological principles. (1)
52. Students should own textbooks. (1)
53. Modern psychology is not accepted by all instructors. (1)
54. Psychology is looked upon by some as a "necessary evil." (1)
55. Psychology should not be taught before the second year. The first course should be purely general, not applied. Students must have foundation and know how to study and think before taking a course diluted with educational theorizing. (1)
56. Psychology is crowded into too short an interval to permit of the many experiments which clinch interest and convince the student. (1)
57. Child psychology is elected by 7/8 or more of the students here. Psychology of adolescence would help them more. (1)
58. There is too little opportunity provided for child study. (1)
59. Should require two semesters of psychology—first course introductory, second general psychology. Both in senior year. (1)
60. There should be more definiteness regarding content of courses, objectives, and methods in teacher-training institutions. (1)
61. In teacher-training institutions there is too much stress put upon extra-curricular activities at the expense of actual mastery of things teachers should know. (1)
62. Teacher-training institutions lack interest in scholarship. (1)
63. American teacher-training institutions do not live up to the ideals they advertise in their catalogs and at conventions. (1)

64. Too little physiology is given. (1)
65. Too much emphasis is placed upon the practical side. It becomes a "methods" course. (1)
66. There is very real need for coöperative effort in determining the essentials. There is little agreement as to content and procedure. (1)
67. There is an insufficient supply of reference books and psychological journals. (1)
68. Psychology should not be open to students who have not had 6 hours of biology. (Not botany and zoology.) (1)
69. The course in principles and technique of teaching should grow directly out of the psychology course. (1)
70. The work in psychology would be greatly strengthened by more observation of children at work and at play. (1)
71. No provision is made for the transfer of principles into actual practice in a training school. (1)
72. The student has no basis for judging principles presented because the course (the only one given in this field) must be taken in the freshman year. (1)
73. Some instructors in our teacher-training institutions do not comprehend modern psychology. (1)

F. *Textbooks* 13

1. Most textbooks are too difficult. (3)
2. There is too close adherence to textbook methods. (2)
3. We need a better textbook for advanced educational psychology. (1)
4. There is no really good textbook for educational psychology. (1)
5. Highly-trained specialists ignore classroom situations. Students are unable to apply their theories to actual teaching. (1)
6. Terminology used by authors varies. (1)
7. Textbooks are too theoretical with insufficient illustrations. (1)
8. Students should own their textbooks. (1)
9. Courses are too formal if a textbook is followed closely. (1)
10. If only one course in psychology is given, the teacher of that course should stick closely to a good textbook. (1)

G. *Students* 21

1. There is little transfer of knowledge acquired to actual classroom work wher teaching. (2)
2. The course is offered too early. Students are not prepared for it their first year. (2)
3. Students need practice in identifying behavior types. (1)
4. There is not enough "carry over" into practice teaching in the training school. (1)
5. About 75 per cent of the students are not qualified either mentally or educationally to do justice to the subject in the time available. (1)
6. There is too little relation between psychology and teaching. (1)

7. Students have not acquired habits of study most economical of time and effort. (1)
8. There is not enough time for students to prepare the work adequately. (1)
9. Students are not all of college-caliber. (1)
10. Students have insufficient practice in orgarizing material and notes. (1)
11. Students have had no experience in the library method of study, and this method is not demanded in all normal school work. (1)
12. So many students develop no permanent interest and so many lack appreciation of scientific method in psychology. (1)
13. Students do not realize their needs until after "real" problems arise. (1)
14. Students do not make direct application of principles. (1)
15. Students should own textbooks. (1)
16. Students are weak in the psychology of the learning processes. (1)
17. Students are too inexperienced to get the subject. (1)
18. Students do not know how to study. (1)
19. Students are not prepared for scientific work; they prefer theory. (1)

H. *Training School* 19

1. The work in psychology as now set up is not thorough enough in its application to the teaching business. (3)
2. There is lack of directed observation in the training school to accompany discussion of topics in class. (2)
3. Normal school students need practice in identifying behavior types. (1)
4. There is not enough "carry over" into practice teaching in the training school. (1)
5. Practice teachers are untrained for their work. (1)
6. There is too little relation between psychology and teaching. (1)
7. The work in psychology is not closely enough related to training school situations. (1)
8. There is too much lag between modern theories and practice. (1)
9. We need a demonstration school and a practice school sufficiently large for real experiences for each student. (1)
10. There is not enough coördination with practice. (1)
11. The work should function more directly in the training school. (1)
12. There must be opportunity for an observation of the application of psychology to classroom work. (1)
13. Students do not make a direct application of principles. (1)
14. Critic teachers need to know and to apply psychological principles. (1)
15. Work would be strengthened by more observation of children at work and at play. (1)
16. No provision is made for the transfer of principles into actual practice. (1)

E

SUMMARY OF INSTRUCTIONAL DIFFICULTIES

1. *GENERAL* (113)

A P	To teach effectively a group of from 40 to 50 children of widely varying abilities. (54)
T P	To get children to "carry over" skills and knowledge sought in penmanship work, into all daily work. (23)
T P A	To teach the child whose M. A. is far below his C. A. (16)
T P	To teach correct posture in sitting and standing. (14)
T P	To teach how to study effectively. (12)
T P	To teach a timid, sensitive child and get a free response from him. (11)
A P	To teach children who have been promoted before able to do work of the grade. (10)
T P	To teach children who cannot concentrate. (10)
T P	To teach children to study or to read silently without movement of lips. (8)
T P	To obtain and hold excellent attention of the children. (8)
T P H	To establish adequate coöperation between homes and school. (8)
T P	To teach children to put into practice the rules of correct English which they have learned. (7)
T H	To raise the general health standard of the child. (6)
T P	To change attitudes of those children who are afraid to exert themselves. (5)
T P	To teach children to keep hands from face and various parts of the body. (5)
T P	To teach the child who seems to desire to "monopolize the limelight." (4)
T P A	To make lesson assignments proportionate to ability of each child (4)
T P	To teach children to do their own thinking. (4)
T P A	To provide seatwork of real worth, rightly graded, and in sufficient quantities. (4)
A	To teach children all the curriculum requires though time is too short for drills necessary to fix firmly the fundamentals. (4)
T P	To help pupils grasp the meaning of what is said to them or of what they read. (4)
T P	To teach children who are "indifferent." (4)
T P A	To give each child individual help when and where needed. (4)
T P	To get children to master the habit of the mechanical preparation of work on paper. (4)

T P To keep all working to limit of ability and letting none be discouraged. (3)

T P To teach the child who does not want to try. (3)

T P A To create a felt need on the part of the children for all that the curriculum requires for the grade. (3)

T P To motivate the retention of facts already studied or discussed. (3)

T P To teach children to acquire a "paragraph sense" in all study and writing. (3)

T P To get children to establish the habit of turning to some other task as soon as assigned work is finished. (3)

T P A To teach children who are unusually slow. (3)

T P To teach children to acquire the habit of speaking without beginning with "Like," "Well-ah," "Why," etc. (2)

T P To get children correctly to copy assigned material. (2)

T P To teach children to do assigned work at school instead of taking it home where wrong kind of "help" is given. (2)

T P A To teach children who are listless, often from physical weaknesses. (2)

T P A To teach children of superior mental ability, who finish assignments long before others do. (2)

T A To provide abundance of reading material containing words already learned. (2)

T P To teach children who have been absent and are far behind others in the group. (2)

T P A To teach new pupils who enter far behind the class. (Often they are unable to make legible forms of letters or figures.) (2)

T P A To teach in a Platoon School where the work in special subjects does not connect with the work of the home-room. (2)

T H To get all children to prepare home assignments. (Parents do not provide place and time for child to study at home.) (2)

T P A To deal with the child who has an "inferiority complex." (2)

A P Effectively to teach while in charge of 49 little pupils for 3 hours, with only one 15-minute intermission. (1)

T P To teach children to use their eyes and ears intelligently. (1)

T P A To teach new pupils entering from other schools having different standards of attainment. (1)

T P To "make the bridge" between kindergarten and first grade. (1)

T P To teach children to distinguish the "right" and the "left" in any application of their uses. (1)

T P To orient children to their surroundings in home-room, in other parts of building, and in the locality. (1)

T P A To carry out an "activity program" in a room equipped as all rooms were a generation ago. (Desks securely fastened, etc.) (1)

T P H To teach children to read well when their mothers "help the children" at home, often breaking down good reading habits which are being formed. (1)

T P To teach children to distinguish between "where" and "wear" both in spelling and in use. (1)

T P A To teach children required topics when little illustrative material is provided and there are no accessible parks or zoos. (1)

T P To teach children effectively when careless study on the part of a few spoils the work of the recitation period. (1)

T P To prevent marking over or erasing of work. (1)

T P To change from atmosphere of a class in drawing to that of academic work. (1)

A To teach children seated six at a table meant to seat four, with 49 children in the room. (1)

A To teach when called often from room to confer about administrative difficulties of school. (1)

T To check, quickly and satisfactorily, the home reading done by children. (1)

T P To prevent, in group discussion, the tendency to talk non-essentials. (1)

T P To strengthen in children a sense of responsibility for thorough knowledge of only *one* phase of the subject in group work. (1)

T P To so vitalize group work as to prevent dullness and inattention on part of audience, during report of child or group. (1)

A To teach all curricular requirements in spite of too numerous calls for extra-curricular activities. (Festivals, programs, etc.) (1)

T P To teach children to talk or to write a summary without prodding. (1)

T P To teach children not to be content with off-hand statements, making decisions without knowing the facts. (1)

T P To teach children to understand ideas instead of merely memorizing words. (1)

T P To teach children to follow directions exactly as given. (1)

T P To develop children's ability to give thoughts of another in own language and manner. (1)

T P To get seventh grade pupils of low mentality and overgrown boys to enjoy reading good books. (1)

T P To get an expression of mental pictures that call for imagination. (1)

P To get children to establish the habit of studying before sessions begin. (1)

T P To get children to realize the absurdity of some of their answers. (1)

P A To respect the rights of all pupils when in the grade are children who are mentally defective, recommended for special classes. (1)

T A To find time for supervision of seatwork and individual projects. (1)

T P To grade children fairly and give them their rightful "marks." (1)

T A To conduct recitations and yet be accessible to those doing manual and other work at their seats. (1)

T A To "carry on" in spite of faulty or too much supervision, especially when supervisors disagree among themselves. (1)

A To teach all of the subjects required by the curriculum. (1)

T P To teach children to become independent and resourceful. (1)

T A H To teach extremely deaf children, having adenoids and enlarged tonsils, whose parents refuse to have surgical work done. (1)

T A	To teach five classes a day in English while overwhelmed with "homeroom" duties. (1)
T	To teach child to recognize words when he habitually memorizes the stories set for reading lessons. (1)
A	To provide proper kind and amount of recreation when no playground is available. (1)
A	In some less formal schools, to get along in spite of lack of follow-up to check the child's work and behavior. (1)
P A	To know whether teaching real fundamentals which develop the child. (1)
T P	To get all children to want to study assigned lessons. (1)
T H	To get some bright pupils who are nervous not to read too much and not to carry many outside activities. (1)
T H	To get assignments in on time (from children). (1)
T P	To get children to think carefully. (1)
T P	To get children properly to estimate the value of time. (1)
T P	To teach the dignity of labor. (1)
TPAH	To teach content of curriculum to children who have too many outside activities. (1)
A	To teach content of a rigid curriculum which allows teacher no choice. (1)
A	To teach two sections in one room on a short period schedule. (1)
A	To teach effectively in spite of frequent interruptions, many unnecessary. (1)
T P	To teach the child who thinks he is worked too hard. (1)
T P	To change the vicarious interest of the child to active interest. (1)
T P	To get the child to sit and hold book properly during reading periods. (1)
T P	To deal with the child who is inattentive after a number of devices have been tried. (1)
T P	To teach children to walk correctly. (1)
T P H	To deal with the seven-year-old child who uses "baby talk." (1)
T P H	To deal with the child who cries on the least provocation. (1)
T A	To provide suitable occupations for children too immature to do the work of the grade. (1)
T P H	To create interest in the work of the school. (1)
T P H	To create interest in thrift banking. (1)
T P	To teach habit of studying directions before starting construction work. (1)
T P A	To get all children to play at recess. (1)
T P H	To develop an appreciation of the good "movie" and of proper recreation. (1)
T P	To aid child to get main idea in each paragraph. (1)
T P	To develop ability to make comparisons in geography and arithmetic. (1)
T P	To teach children to acquire definite sense of location of places in geography and history. (1)

T To aid children in acquiring muscular coördination, as in skipping, etc. (1)

T P A "Nothing is hard to teach if you use a good method, go slowly with slow children, and have time to drill." (1)

2. *ARITHMETIC* (95)

P T Interpretation of problems. (18)

T P Finding approximate quotient. (14)

T P Performing any operation with numbers containing naughts. (13)

T P "Carrying" in addition and multiplication. (13)

T P Placing of decimal point correctly and habitually. (10)

P T "Borrowing" in subtraction. (10)

T P Dividing with 0 in quotient. (8)

T P Placing partial products correctly. (7)

P T Adding accurately and with reasonable speed. (6)

P T Multiplying any multiplicand by any multiplier. (6)

P T Habitually to check each remainder whenever he subtracts in "long" division. (6)

P T Dividing by such divisors as 19, 27, etc. (6)

P T Placing of first figure in quotient when doing written work. (6)

P T Complete mastery of certain more difficult combinations as 7×8, 9×6, etc. (6)

P T Subtraction in the "long" division process. (5)

P T "Short" division. (5)

P T Approximating answers. (5)

P T Division of any type. ("Hardest fundamental.") (4)

P T Subtraction of any type. ("Hardest fundamental.") (4)

P T Accuracy in all fundamental operations. (4)

P Solution of such problems as: 7/8 of a number is 56. What is the number? (4)

P T Association of process already learned with conditions presented by a problem. (4)

P T Correct placement of numbers to be added or subtracted. (3)

P T Multiplying with 0 in the multiplicand. (3)

P T Habitually to check work done. (3)

P T Finding fractional parts of numbers. (3)

P T Cancellation of numbers—for each factor removed from one series, same factor to be removed from other. (3)

T P Comprehension of denominate numbers. (3)

T P Counting on fingers instead of recalling combinations taught. (3)

P T Uneven division. (2)

P T Addition. ("Hardest fundamental.") (2)

P T Multiplying with 0 in the multiplier. (2)

P T Reading of signs + and $\times$, + and −. (2)

P T Tendency to use old addition process instead of multiplication when new to them. (2)

P T Complete process of calculation, such as final reduction of a fraction to its lowest terms. (2)

P T Retention of processes once mastered after learning other new processes. (2)

T P Learning fractional equivalents, as 3/4 = 6/8. (2)

T P Inverting terms of divisor when dividing by a fraction. (2)

T P Deciding how problem should be worked before beginning actual work. (2)

T P Finding what per cent one number is of another. (2)

T P Comprehension of fractional parts and their relative sizes. (2)

T P Habitual use of short methods after learning these, e.g., multiplying by multiples of 10. (2)

T P A Understanding and learning Roman numerals in second grade. (2)

T P Placing decimal point in square root of a number. (1)

T P Finding selling price when cost and per cent profit are known. (1)

T P Finding Bank Discount. (Complete mastery of.) (1)

T P Addition of fractions. (1)

T P Understanding that whole units = 5/5, 4/4 of themselves. (1)

T P Understanding that 76.4% does not equal a whole number. (1)

T P Understanding that .764 = 76.4%.

T P Finding the base when a per cent of it is given. (1)

T P Finding missing terms in percentage. (1)

T P Finding ratio of one fraction to another. (1)

T P Finding common denominator of fractions. (1)

T P Dividing by divisors like 77 and 69. (1)

T P Dividing by divisors of three digits. (1)

T P Solving verbal problems of two or three steps. (1)

T P Changing mixed numbers to improper fractions. (1)

T P "Borrowing" when subtracting mixed numbers. (1)

T P Adding fractional part of a number to the integral part. (1)

T P Remembering to use the guiding number in his divisors. (1)

T P Relationship between multiplication and division. (1)

T P Adding 10 to numbers. (1)

T P Subtraction by the Austrian Method. (1)

T P Understanding the difference between $\underline{\times\ 8}^{2}$ and $\underline{\times\ 2}_{8}$. (1)

T P Adding by endings, as 8 + 4, 28 + 4, 48 + 4, etc. (1)

A P Understanding and learning division in second grade. (1)

T P In cancellation of numbers, for each factor removed from one series, *only one* factor is to be removed from the other series. (1)

T P Notation of numbers which combine decimals and common fractions. (1)

T P Understanding of processes, as $\$5 \div \frac{3}{15}$ or $2 \div 1.75$. (1)

T P Understanding of *minuend* and *subtrahend* in: \$400 − \$10.66 2/3. (1)

T P Solving verbal problems where the solution depends upon the answer to a preceding problem. (1)

T P Solving verbal problems in which numbers appear which are not necessary to the solution. (1)

T P Maintaining of accuracy in fundamental operations after complex and difficult operations are presented for study. (1)
T P Placing divisors properly in statements of division. (1)
T P Dividing both numerator and denominator by the same factor in reduction of fractions. (1)
T P Application of facts once learned, e.g., multiplication combinations when reducing fractions. (1)
T P Recognition of easy combinations of numbers in long column addition, as 7 and 3, 9 and 6, etc., in same column. (1)
T P Combinations with 5 except 5 + 5. (1)
T P Correct placement of numbers for columnar addition, as $\frac{2}{10}$ instead of $\frac{2}{10}$. (1)
T P Finding remainders in uneven division. (1)
T P Reading of large numbers correctly. (1)
T P Making numerals 4, 7, and 9 backwards, even with correct models before them. (1)
T P Telling time, using five-minute intervals rightly instead of as one minute. (1)
T P Adding balance to "Paid Out" column to make it equal "Receipts" total. (1)
T P Finding exact number of days between two dates. (1)
T P Understanding the difference between 1/2 and 1/2%. (1)
T P Understanding different ways of expressing same operation. (1)
T P Solving of problems in which only one number is stated. (1)

Teacher Difficulties:

T P To present multiplication tables concretely. (3)
P To develop number sense where it is lacking. (2)
T P A To aid children to acquire desirable skills in subtraction when they have been taught by different methods under different teachers. (1)
T P To teach solution of all problems as if numbers were abstract, e.g., Find the cost of 42 yd. velvet at $3 a yd.—42 × 3 × $1 = $126. (1)
P A To teach subject matter beyond the power of children to comprehend: volumes and areas of solids and planes not frequently used, ratio, compound interest, etc. (1)
P T To teach number facts to normal second grade pupils who are unable to comprehend these facts. (1)

3. *READING* (40)

T P To improve enunciation. (10)
T P To apply knowledge of phonics. (8)
T P To comprehend quickly in silent reading. (7)
T P H To pronounce words correctly. (5)
T P To recognize old words in new places. (4)
T P H To attack new words without fear. (To try before asking for help.) (4)

T P H To overcome faulty forms of expression. (3)
T P To express thought more clearly. (3)
T P To read without pointing to the words as he reads. (3)
T P To get the thought conveyed by the words. (3)
T P To read by phrases, that is, to recognize thought units. (3)
T P To distinguish between *d*, *b*, *p*. (2)
T P To distinguish between *m* and *n*. (2)
T P To distinguish between *g* and *q*. (2)
T P To make the transition from print to script. (2)
T P H To acquire a more extensive vocabulary. (2)
T P To distinguish between "saw" and "was," "of" and "for," etc. (2)
T P To put initial phonogram before a "family," as *b-ook*. (2)
T P H To acquire a better vocabulary. (Foreign language spoken in their homes.) (1)
T P H To sound final letters, such as *ed*, *t*, *d*, *r*, *s*, and *g*. (1)
T P To refrain from using the rising inflection in oral reading. (1)
T P To learn a stock of sight words sufficient to do any reading. (1)
T P To recognize words that are either difficult to illustrate or that are not on the phonetic list, such as *what*, *have*. (1)
T P H To learn short *e* when method in use gives "egg" as key-word. (Children pronounce "egg" as "agg.") (1)
T P H To learn short *i* when method in use gives "ink" as key-word. (Children pronounce "ink" like "enk.") (1)
T P To know words after "sounding" them. (Children get words only after someone else "sounds" them.) (1)
T P H To read well orally. (1)
T P To be interested throughout the year in drills in phonics and word-recognition. (1)
T P To distinguish between "when" and "where," "them" and "they," "then" and "than," etc. (1)
T P To break habit of continuing to make a mistake apparently merely to correct himself after having made it. (1)
T P H To break habit of merely telling the story (which he has heard before) instead of reading the assignment set, though he knows 90% of the words. (1)
T P A To acquire a large reading vocabulary in a short time, even though child is naturally very slow. (1)
T P A To be interested in reading assignments when repeating the work of the grade. (1)
T P A To master all the required amount of reading in grade I. (1)
T P H To pronounce "wreath" (called "wreaf.") (1)
T P H To pronounce words in possessive form. "His father's messages" read "His father meshages." (1)
T P A To teach children to read who have not "reading readiness." (3)
T P H To teach a reading and speaking vocabulary to children from non-English speaking homes. (2)
T P To increase comprehension in silent reading of those pupils who read very rapidly. (1)

4. *ENGLISH* (37)

T P To develop a "sentence sense." (15)
T P H To teach children not to use such expressions as, "My cousin, she," "ain't got," "so then," "wid," "dose," "den," etc. (14)
T P To teach children to punctuate correctly. (11)
T P To prevent formation of habit of excessive use of "and," "then," etc. (8)
T P To habituate the children to neatness in all written work. (5)
T P To correct the use of homonyms: there and their; to, too, two. (5)
T P To teach children to use correct tense forms of verbs and to observe sequence of tenses. (4)
T P To teach children to use capital letters correctly. (3)
T P To teach children to distinguish possessive and non-possessive forms of words. (3)
T P To teach difference between possessives and plural forms of words. (2)
T P To teach children to understand and use correctly such words as "lie" and "lay," "prophecy" and "prophesy," "accept" and "except." (2)
T P A To motivate the mastery of the grammar required in the grade. (2)
T P To teach the agreement of a verb with its subject. (2)
T P Correct use of nominative forms after the verb "to be." (2)
T P To teach children not to ignore the beginning, in which characters are introduced and setting given, when they re-tell stories. (1)
T P To teach children not to omit words from sentences in their written work. (1)
T P To teach children to begin sentences with capital letters and to close with periods those sentences which *tell*. (1)
T P To teach children the differences between a poem and a story. (1)
T P To teach children what is meant by an "original poem." (1)
T P To teach children to dramatize stories. (1)
T P To teach children to organize material to enable them to give a report to the class. (1)
T P To teach children to omit unnecessary words in conversation and in all recitations. (1)
T P To teach children not to begin sentences with such words as "because," "so," "and," etc. (1)
T P To teach children to write business letters. (1)
T P To teach children to acquire and maintain the helpfully critical attitude during the reading of stories written by other children. (1)
T P To teach children to express their ideas in sentences worthy of their grade of advancement. (1)
T P To teach children to make an outline of material read. (1)
T P A To teach children to recognize parts of speech in sentences. (1)
T P To stimulate an interest in biographies. (1)
T P Correct use of plural forms of pronouns. (Agreement with antecedents in person and number). (1)

T P To teach habitual use of the apostrophe in contractions and possessive forms. (1)
T P A To teach habitual use of an auxiliary verb with the past participle. (1)
T P To teach formation of irregular plurals. (1)
T P To teach selection, arrangement, and expression of children's ideas in composition work. (1)
T P A To get pupils of below-average mentality to like the study of grammar. (1)
T P To teach the habitual use of the objective case for the object of a verb or preposition. (1)
T P H To teach the habitual use of doesn't instead of don't with subjects in singular number (except "I"). (1)

5. *GEOGRAPHY* (25)

T P To teach directions on maps. (2)
A To teach causes of change of seasons (fourth grade). (2)
A To teach zones (fourth grade). (2)
T P To teach use of maps. (2)
T To teach the motions of the earth. (2)
T P To teach the ocean currents. (2)
T P To teach children to see the importance of facts in their everyday lives. (1)
A To get time for the excellent problems suggested by the pupils. (1)
T A To teach formation of land forms (fourth grade). (1)
A To teach latitude and longitude (fourth grade) (1)
T P To develop the commercial phase of the subject. (1)
T P To teach solving of problems. (1)
T P To teach mathematical geography. (1)
T To get children to express all that is desired on a given subject. (1)
T P To teach winds. (1)
T P To teach trade winds. (1)
T P To teach the construction and use of canal locks. (1)
T P To help children who recite well orally but fail in written expression of ideas. (1)
T P To understand the moon's phases. (2)
To understand atmospheric pressure (Teacher). (1)
T P To understand the effects of altitude. (1)
T P To fix in mind the names of foreign cities having names which are hard to spell and to pronounce. (1)
T P To understand the changing of the position of the point of vertical ray between the tropics. (1)
T P To understand use of latitude in relation to distance in miles. (1)

6. *HANDWORK* (15)

T P To get muscular control in handling scissors, etc. (2)
T P To spread paste smoothly over a surface. (1)
T P To use hammer correctly. (1)
T P To judge correctly in choice of nails, etc. (1)

T P To make buildings strong. (1)
T P To make buildings proportionate to size of objects. (1)
T P H To tie a bow correctly. (1)
T P H To desire to progress in work from day to day. (1)
T P To make better engines; add freight-house, etc. (1)
T P To use brushes correctly in painting. (1)
T P To clean brushes properly after using. (1)
T P To develop consciousness of proportionate size of objects. (1)
T P To fold construction papers carefully. (1)
T P To cut patterns of the proper size for dolls' clothes. (1)
T P Properly to use clay-model from one lump; make objects strong; make smooth surfaces. (1)

7. *SPELLING* (8)

T P A To individualize spelling lessons. (6)
T P Correctly to separate words into syllables. (2)
T P To spell words containing silent letters. (1)
T P To visualize words. (1)
T P To spell correctly in writing. (No difficulty in oral spelling.) (1)
T P To spell words ending in a single consonant after a vowel. (1)
T P *First* to look at word to be learned. (1)
T P Correct pronunciation of word before studying it. (1)

8. *HANDWRITING* (6)

T P A To get right beginnings of proper writing positions and movements. (4)
T P Habitually to cross *t's*. (3)
T P To form letters correctly while movement is being mastered. (2)
T P Habitually to dot *i's*. (1)
T P A To get the slant and shape of letters so often seen in the writing of first grade pupils. (1)
T P To get correlation of proper form and spacing with correct movement. (1)

9. *MUSIC* (8)

T P Raising of monotones. (1)
T P Use of sweet head tones. (1)
T P Producing smooth quality instead of choppy. (1)
T P Clear enunciation of all words. (1)
T P Development of rhythm. (1)
T P A Reading of notes. (Class uneven in preparation.) (1)
T P Recognition of time values of different notes as ½, ¼. (1)
T P Singing of *sol-fi* interval. (1)

10. *HISTORY* (7)

T P To see working of cause and effect.
T P To develop a "time sense." (Ability to see an event in its period). (1)
T P To realize that all history is not past. (1)

T P Habitually to locate on maps the places mentioned. (1)
T P A Understanding of mode of life in Colonial Days (1750–1775). (1)
T P A To equal the movie in making the subject fascinating. (1)
T P A Connecting exciting bits with important facts. (1)

11. *DRAWING* (6)

T P To use water colors correctly. (1)
T P To understand circular perspective adequately. (1)
T P To apply the principle of dominance in composition. (1)
T P Properly to space letters in making posters. (1)
T P Properly to use upper and lower case letters in lettering. (1)
T P A To distribute materials, teach lesson, and collect work, within the 40-minute period allotted in the schedule. (1)

12. *DISCIPLINARY* (121)

T P H	Children talking without permission. (45)
T P	Children annoy or disturb others by not taking care of own hands, feet, tongues, etc. (22)
T P H	Children interrupting others. (19)
T P A	Children wriggling in their seats. (17)
T P	Children whispering or attracting attention. (16)
T P A	Securing the quiet necessary for good recitation work without harmfully curbing freedom of activity desirable for those not in class. (14)
T P H	Children who are careless about everything. (13)
T P H	Children who do not attend to orders or directions the first time given. (10)
T P H	Children who lack self-control. (9)
T P H	Children who desire to "monopolize the limelight." (9)
T P H	Children who chew gum in school. (7)
T P	Children who will not remain in their seats. (7)
T P	Children who talk in undertones to self or others. (7)
T P	Children who desire to discuss their work with other children. (6)
T P	Children who giggle. (6)
T P H	Children who play with unnecessary articles, perhaps brought from home. (6)
T P	Children who answer aloud when someone else is called on. (6)
T P	Curbing social proclivities when they interfere with class work. (6)
TPAH	Poor attendance. (6)
T P	Children who play with ruler, pencil, etc., or draw pictures. (5)
T P A	To keep children profitably busy all the time. (5)
T P	Children who stand to show eagerness to recite. (5)
T P	Children who pass or write notes to others. (5)
T P A	Children who fail to do required work. (5)
T P A	Children who loiter in halls and cloakrooms when entering school. (5)
T P	Children who want pencils sharpened too frequently. (5)
T P A	Children who are noisy about getting wraps and forming lines. (Whole grade). (5)
P H	Children who do not know the meaning of the word obedience. (5)
T P H	Children who are stubborn or sulky. (5)
T P A	Noise of necessary (or unnecessary) moving of chairs, tables, or feet. (5)
T P	Children who are restless, especially after long vacations. (4)

T P		Children who have not yet learned to control their voices in conversation and play, disturbing other groups at work. (4)
T P	A	Boisterousness when entering the building. (4)
T P	H	Indecency in toilets and on public streets. (4)
T P	H	"Fussing" and habit of fretfulness. (4)
T P		General tendency toward waving of hands when wishing to speak or to recite. (4)
T P		Children who cause noise and confusion between recitation periods. (3)
T P		Children who turn up seat and sit on its edge, obstructing view of children behind. (3)
P		Keeping attention to class work when other interesting activities are going on in same room. (3)
T P	H	To teach children how to "get on" with others. (3)
T P	H	To awake the dreamer—the child who cannot concentrate for a reasonable time. (3)
T P		Children who have not yet learned to be careful when using furniture, toys, play apparatus, etc. (3)
T P		Children who have not yet learned the importance of all working together, e.g., one who pulls too hard spoils the enjoyment of the game. (3)
T P	H	"Bossiness" on the part of some children. (3)
T P	A	Communicating with others in cloakrooms. (3)
T P		Slow assembling. (3)
T P	A	Too much looseness, even in the freedom which is now being sought for. (3)
T P	H	Hitting or slapping other children. (3)
T P	A	Pushing or fighting and then blaming others for misbehavior. (3)
T		Spilling of ink. (3)
T P		Child of the "Smart Alec" type. (2)
T P	H	Children of quarrelsome natures who start arguments or quarrel over little things. (2)
T P	A	Children who are slow about getting into lines. (2)
T P		Children who desire to show their work to other children. (2)
T P		Children who whisper answers during drills and games. (2)
T P	A	Children who have not yet learned to go quietly through halls in spite of good example of the majority. (2)
T P	H	Children who use bad language, much of which has been learned at home. (2)
T P		Children who pinch others. (2)
T P		To encourage children to report things that are important but to refrain from tattling unimportant difficulties. (2)
T P		Child who deliberately shakes desk causing blots on child's work in front of or behind him. (2)
T P		Walking about the room needlessly. (2)
T P	H	Obedience to other teachers and to council members. (2)
T P	A	Truancy. (2)
T P	A	Forgery. (Signing names of others to excuses, reports, etc.). (2)

T P A Running through halls and up the stairs when entering the building. (1)
T P A Walking noisily when entering the building. · (1)
T P A Confusion resulting when elementary grade children pass to classes (departmental work). (1)
T P To eliminate disorder when children are at the blackboard. (1)
T P Child who places arm on desk behind, sometimes overturning inkwells. (1)
T P Watching another instead of working. (1)
P A Children of "border-line" intelligence who interfere with the work of other children. (1)
T P Children who try to be "funny." (1)
T P To teach children to distinguish between real fun and misconduct. (1)
T P Children who are simply silly. (1)
T P To teach children to walk instead of run across the room to avoid accidents. (1)
T P To help boys to realize that pushing and punching are not the best ways of showing disapproval. (1)
T P Sliding on tile blocks in halls. ·(1)
T P Turning around to watch monitors collect or distribute materials. (1)
T P Turning around to play with neighbors. (1)
T P Slowness in collecting things. (1)
P Developing a desire to do right for right's sake and not from fear of force. (1)
P H Thumb-sucking (boys and girls eight and ten years of age). (1)
P H Pencil-sucking. (1)
T P Poor reader who asks to go to toilet when called upon to read. (1)
P One class stops working to listen to another recite. (1)
P A Mentally deficient child who bites, kicks, slaps, etc., before anyone can prevent him. (1)
P A Throwing snowballs during first snowfall of the season. (1)
P To inculcate in children a sense of "the eternal fitness of things." (1)
T P Boys who tie knots in pull-strings of window shades. (1)
T P Working arithmetic lesson during silent reading period. (1)
T P Fighting, especially when a new boy moves into the district. (1)
T P H Smoking. (Boy in fourth grade). (1)
T P H To keep nervous child calm. (1)
T P H To teach children to show student teachers the same respect which they show supervisors. (1)
T P H Boy who went home after being told to remain after school. (1)
T P H Boys who carry "parlor matches" in their pockets. (1)
T P H Pupils who eat candy in the classroom. (1)
T P H Carelessness about wearing wraps during intermission. (1)
T P H Undesirable behavior when with special teacher. (1)
T P A To find the guilty party when the name of a pupil is found on wall in hall. (Name misspelled). (1)

T P A To control children's tendencies to boisterousness or too great enthusiasm at recess, etc. (1)
T P A To keep general school rules. ("Keep off the grass" type). (1)
T P A H To make discipline carry beyond the door. (1)
T P A Boy in 8th grade of public school who has been in State Industrial School becomes furiously angry when unjustly accused. (1)
T P A Successfully to impress the average rough boy in the 8th grade that his act is offensive to the group and not to the teacher. (1)
A To build up *morale* in the school when teacher-turnover is excessive. (1)
T P A When someone makes a noise which teacher cannot trace to culprit and no one confesses, what should be done? (1)
T P A H Someone should assist with discipline to help pupils get respect for law and authority. (1)
A Someone should listen to teacher's side of a case before decisions are made. (1)
T P To deal with a child who has had his "turn" in oral work, and then ceases to pay attention. (1)
T H Spitting at others. (1)
T A H Boy will not attend to own work. (Persists in bothering teacher and other pupils. Mother reports same actions at home). (1)
T P A H Child frequently late. Parent sends word child refuses to rise when called. (1)
T P H Carelessness about personal appearance due to home influence. (1)
T P Carelessness about personal appearance due to pupil himself. (1)
T H Parents fail to send their children to school clean. (1)
T H Parents fail to send their children to school on time. (1)
T P H Parents fail to realize that their children often misunderstand or misrepresent. (1)
T A H Parents do not coöperate in matters of health of child. (Get spectacles when needed, etc.) (1)
T P H To get closer contact with homes of pupils. (1)
How to know if discipline is mere room discipline or that which leads to self-control on part of pupils. (1)
T P A To get whole class to get coats and hats and form lines quietly. (1)

13. *MORAL—SOCIAL* (80)

To teach the child or the children:

T P H To show respect for property and personal rights of others. (48)
P To tell the truth at all times. (46)
T P To be honest in his work. (Not copy). (39)
T P H To refrain from stealing money, pencils, caps, books, etc. (30)
T P To refrain from tattling. (20)
T P H Vast majority of whom come from homes of foreign parentage living in crowded business section. (Greater part of teacher's work is that of character training and formation of good habits). (20)
T P H To eliminate fear, which often prompts to untruthfulness. (15)
T P A To keep place in lines without pushing either to get ahead or to keep others behind. (14)

T P To be responsible for doing best work. (13)
T P H To establish habits of cleanliness of clothes and person. (12)
T P To be responsible for self at all times. (10)
T P H To develop ideals of good sportsmanship. (10)
T P To be trustworthy during absence of teacher. (9)
T P To acquire habits of tidiness about desks, room, grounds, etc. (8)
T P To be responsible for working steadily without loss of time. (8)
T P H To be courteous to all others. (8)
T P H To develop ideals of fair play. (8)
T P To develop sense of honor in keeping promises. (8)
T P To acquire proper work habits. (Getting to work rapidly, finishing work, not wasting time, etc.). (7)
T P To refrain from laughing when mistakes are made or "funny" questions are asked. (7)
T P H To establish habits of being on time. (7)
T P To refrain from answering out of turn. (Lack of self-control). (6)
T P To develop self-reliance. (Independence of thought and action). (5)
T P H To be responsible for providing necessary tools, materials, etc. (5)
P H T Not to leave books at home or on playgrounds. (4)
T P A Not to leave caps and coats in rooms for their special subjects and then assert that someone else took them. (4)
T P H Not to waste materials. (Children take more paper than is necessary). (4)
T P H To be responsible for being on time. (4)
T P To be responsible for being quiet in halls and basement. (4)
T P H To develop ideals of unselfishness. (4)
T P H To develop ideals of good citizenship. (4)
T P To create attitude of willingness to do own share of the disagreeable tasks. (4)
T P To have pride in being trusted. (4)
T P To develop class spirit so that the group work may be more effective. (3)
T P To discriminate between real helpfulness and meddling. (3)
T P H Not to try to "get even." (3)
T P Not to soil or tear books. (3)
T P To refrain from laughing when an "odd" child comes into the room. (2)
T P To refrain from teasing others, e.g., calling others undesirable names. (2)
T P To cultivate sympathy with joy or unhappiness of others. (2)
T P To be honest in correcting or checking the work of another pupil. (2)
T P H Not to show lack of respect for their elders. (2)
T P H Not to show lack of prompt obedience. (2)
T P To watch one's self instead of the other child.
T P To watch one's self instead of the other child. To do the right thing instead of following another. (2)
T P H Not to blame others for troubles on school grounds at recess. (2)

T P To attend to own affairs, especially when no one is watching. (2)
P To make a nice distinction between right and wrong. (2)
T P To keep hands off desks when standing in aisles. (2)
T P To cultivate in children a true sense of humor. (2)
T P H To refrain from being impudent. (2)
T P To use competitive games and devices most carefully so not to incite to dishonesty and ill-feeling. (2)
T P H Not to bite finger nails. (2)
T P To show consideration for constructions made by others. (1)
T P To have perfect control of own voice, manner, temper, and general behavior through storm and calm. (1)
T P Not to report wrong grades in speed tests. (1)
T P Not to study wrong lesson while purporting to be working at right place. (1)
T P Not to look up answers in back of books before doing examples. (1)
T P H To have needful pride in self-possessions, schoolroom, school buildings, etc. (1)
T P H To avoid impolite curiosity about teacher's desk and belongings. (1)
T P H When distributing materials, not to keep largest or best for himself. (1)
P H To keep "hands off" each other. (Sex problem). (1)
T P Not to powder nose during music period. (1)
T P H To show courtesy to girls. (1)
T P Children who are too noisy at school band concerts and school parties. (1)
T P To like to have desirable people in the room (busy, courteous, truthful). (1)
T P H That bluffing is despicable. (1)
T P H To break habit of swearing. (1)
T P H To be kind to birds and animals. (1)
T P A boy who is a born leader but older than the others and handicapped by poor foundation and home influences. (1)
T P H To develop a realization of interdependence. (1)
T P H To be arbiter in family feuds. (1)
P H Not to spend lunch money for gum or prize packages. (1)
T P H Not to assert that articles were taken by "somebody" before looking for article frequently merely misplaced. (1)
T P A Even though there is a harmful effect upon timid children when stern discipline is necessary for bad children. (1)
T P H That submission to authority is as important and honorable as leading. (1)
T P To become one of a mass, and to subordinate their own needs and wishes to the well-being of the group. (1)
T P To enjoy making things for others, such as aprons for school sale, etc. (1)
T P H Even though there is a lack of more thorough acquaintance with them. (1)

A To get teachers to meet with pupils on playgrounds. (1)
A H To keep Parent-Teacher Association helpfully alive. (1)

14. *MISCELLANEOUS* (42)

A Interruptions. (11)
A Clerical work during school hours. (4)
A Lack of school equipment (sign marker, duplicator, etc.) needed in preparatory work. (3)
A P Passing of classes through the halls. (Platoon school.) (3)
A Making out of intelligence test cards. (2)
A Children taken out of room for special lessons. (2)
A Reading and initialing of innumerable notices during school hours. (2)
H Normal child who does not get enough sleep. (Drowsy in school.) (2)
P Child who, when alone, will not do his seatwork. (2)
H T P Children losing handkerchiefs, gloves, money. (Often do not claim handkerchiefs when found.) (2)
A Schools are not equipped for small children. Books are too heavy, blackboards too high, etc. (2)
H Families changing residences frequently to detriment of children. (2)
A Collection of money for Red Cross. (1)
A Sending notices home about Armenian Relief. (1)
A Collection of weekly milk money. (1)
A Preparation of lists of names of children for the P–T–A. (1)
A Preparation of notes to remind children to return in afternoon to see dentist. (1)
A Filling in of blanks for physicians for suspected health defects. (1)
A Sending exclusion notices to parents in cases of certain diseases. (Mumps, etc.) (1)
A Sending notices of P–T–A meetings to parents. (1)
A Counting of and signing for school supplies which arrive during session. (1)
A Taking census of school children (hours of work). (1)
H Children who go to toilet too frequently. (1)
A P Subnormal children who find it difficult to learn their places in the room. (1)
H T P Children who lack "gumption" to grasp a situation and react intelligently. (1)
A P Games and other activities carried on under windows of classroom during school hours. (1)
A Repairs made on building which might have been made during vacation. (1)
A Inefficient janitor service. (Winds clock after school session begins.) (1)
H On Mondays children are tired and seemingly have forgotten many things. (Attend shows or go visiting Sundays.) (1)
H P Children who do not know how to put on rubbers and tie shoestrings. (1)

A	Primary rooms not equipped for modern procedure. (No place for children's unfinished work.) (1)
H	Children improperly clothed. (Too bulky clothing or too tight.) Children restless and uncomfortable). (1)
H	Ignorance of parents about correct feeding of children. (1)
A	Lack of proper wardrobe space in school building. (1)
A	Sudden innovations. (New methods introduced before proven. Disastrous results.) (1)
A	School policies directed by book companies. (1)
A	Too many special days. (1)
A	Too much stress being put upon improvement of in-service teachers. (1)
H	Sleepiness in school (due to staying up late nights). (1)
A T	Provision for helpful activities during recess periods in inclement weather. (No gym.) (1)
P H T	"Too much paint" used by some girls. (1)
T H P	Habitually to meet people easily and graciously. (1)

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